CSL 3
FOR CONSULTATION ONLY
AS000973
20
7

ECONOMICS OF PROTECTION IN INDIA

(Banaili Readership Lectures delivered at Patna University in 1928)

BY

Prof. V. G. KALE, M. A.,

FERGUSSON COLLEGE, POONA

SECRETARIAT LIBRARY
No 6697
24 NOV. 1933
GOVERNMENT OF INDIA.

POONA:
PRINTED AT THE ARYABHUSHAN PRESS, POONA, BY ANANT VINAYAK
PATVARDHAN AND PUBLISHED BY PROF. V. G. KALE, M. A.,
AT "DURGÂDHIVÂSA", POONA 4.

1929

PREFACE.

The following pages reproduce the Banaili Readership Lectures I delivered at Patna University in the first week of October, 1928; and I am indebted to the University for permitting and facilitating their publication. In preparing the copy for the press, I have made only a few suitable additions.

The chief object of the Lectures was to examine the policy of protection adopted in India from the theoretical as well as the practical point of view; and in doing this, I have drawn freely on my experience as a member of the Tariff Board for two years and have made full use of the reports of that body. The Lectures are, therefore, calculated to prove helpful to advanced students of Economics and to practical men of business.

"Durgādhivāsa,"
Poona 4.
6 March, 1929.

V. G. KALE.

CSL 5

CONTENTS.

CHAPTERS		PAGES
I	Introductory...	1
II	International Trade	16
III	Lines of Protectionist Policy	34
IV	Essential Facts	47
V	Analysis of Cost	63
VI	Cost and Measure of Protection... ...	77
VII	Conclusion	90

GSL 6

ECONOMICS OF PROTECTION IN INDIA

I

INTRODUCTORY

It is a little more than four years since the Indian legislature and the Indian government deliberately adopted the policy of protection, and it is yet too early to pass judgment on the effects of what was a radical departure from the time-honoured fiscal practice and from the traditional conception of the state in relation to its attitude and duty towards the industries of the country. I do not, therefore, propose, in the course of the present series of lectures, to deal with the actual working of the Indian protective tariff or with the development of such industries as have secured protection at the hands of the government, to ascertain to what extent the policy of 'discriminating' protection has proved effective. This would indeed be a subject for interesting investigation, but no useful or fruitful results are likely to be obtained until a good deal of experience spreading over a reasonably long period, is available. I believe there is another direction in which the field may be beneficially explored and in which patient study is calculated to yield a copious harvest of economic interest. I refer to the examination and the analysis of the varied conditions in which different industries claiming protection have been worked, the peculiar difficulties they have encountered and the special need they have felt for state assistance. A casual glance at the list of the industries which have so far asked for public help, is enough to show the varied types of the industrial undertakings that are carried on in India and the characteristic nature of the problems they have had to face. It will suffice if the names of a few of the leading industries which have claimed fiscal protection, are

CSL

here mentioned. The manufacture of steel was the first to receive attention. Then there were the paper, magnesium chloride, printer's ink and cement industries which submitted their cases for investigation. And the cotton textile mills, the manufacture of matches and kerosene oil have been prominently in the public eye during recent months.

What is common to all these industries is their inability to market their output at competitive prices and their demand that they should be assisted with a protective tariff or a bounty or both for a temporary period of varying length. The comparative weakness of the indigenous industries is, however, the result of apparently similar causes working in each case in a different manner. Conditions in relation to the supply and cost of raw materials and fuel, the accessibility of adequate capital for running the enterprise, the relative efficiency of labour, the size and the distance of works from sources of raw material and fuel and from the market, the nature of superior supervision, the methods of marketing, transport facilities and charges, etc. are some of the more important matters which affect industries and cause trouble to their organizers and conductors in different ways and degrees. The ultimate cost of placing a commodity on the market and the quantity that can be disposed of at a profit are the decisive considerations in each industry, and if an enterprise is to be successfully run, the numerous items constituting the cost of production have to be so procured and utilized that the selling price will leave a reasonable margin of profit to the owner. The physical and technical production of a commodity is not the same as its economic production. The distinction does not, however, appear to have been always clearly understood, and several industrial ventures have come to grief in India on that account. It is sometimes thought that as there is abundant raw material and fuel and there is no lack of cheap labour and of an extensive demand for commodities in India, it ought to be practicable for a man of enterprise to carry on an industry successfully if, of course, the technical and the scientific knowledge and capital needed are available. These last are indeed indispensable. But though a manufacturer may turn out a good article he

CSL

may not be able to sell it profitably. There he has to adjust his operations and methods to the tastes and pockets of the consumers and regulate his cost of production accordingly. He has, besides, to face the competition of rivals who will try to undersell him. And in the case of organized industries of the modern type, the competition comes from foreigners who carry on their activities under different conditions which are, for various reasons, more favourable. An Indian manufacturer may successfully turn out beautiful clocks and wrist watches; and technically and artistically speaking, they may be marvellous. But for all that, he will not be able to sell his output and carry on the manufacture as an industry unless he can market his articles in sufficient quantities and at prices fairly comparable with those at which the foreign products are selling in the local markets. If the home manufacturer fails to produce his goods on level terms with his foreign rivals, he feels he has a just grievance and appeals to his government to extend to him a helping hand for a period of time during which he hopes to be able to make up the distance in the race of competition by introducing improvements and economies in the working of his factory and by increasing the efficiency of his methods of marketing.

Are the expectations of the manufacturer founded on reasonable calculations? Are the promised economies and improvements practicable? Will public assistance prove helpful in placing the indigenous industry on secure foundations? And will the tax-payers' and consumers' sacrifice be ultimately rewarded? These are the pertinent questions to ask in connection with an industry that asks for public aid in the shape of a protective tariff or a bounty; and on the answer that can be made to them, depends the justification or otherwise of the protection that may be granted. It is, of course, assumed here that the more wealth a nation produces with its own capital and labour, the better for it, though it is conceded that if a portion of this national income can be exchanged for cheaper foreign imports, the transaction is advantageous to both the parties. Protection is called for only to enable the indigenous manufacturers to produce commodities as cheaply as the imported ones. But even in spite of protection, the nation may not be in a position to produce several commodities with comparative cheapness; and this consideration will prescribe the limits within which protection will prove economical. There is in world economy a division of labour corresponding to the division of labour subsisting within a country, and nations specialize in certain industries as do localities and communities within the limits of every country. Internal division of labour and exchange between parts of the same country are, however, regarded as natural and beneficial whereas international division of labour and exchange appear to be harmful. Competition within a country is supposed to make for greater efficiency and gain to all concerned; but foreign competition is supposed to be detrimental to the best interests of indigenous industries and the community as a whole. Why is protection sought against the foreigner when he is only an innocent and helpful competitor and unconsciously, if not consciously, co-operates in lowering prices, causing a saving and increasing the income of the people?

This discussion opens wide vistas of fundamental economic theory and of national, industrial and fiscal policy. It will be convenient and also logical to take up the larger issues first and to consider the relation of economic theory and national economic policy, then to discuss the recognized principle underlying international exchange and lastly to examine the position of India's organized industries in the light of economic theory so to elucidate the relation between a policy of protection and national well-being. The question of the relative merits of free trade and protection has been discussed during the past many years almost *ad nauseam*; and the arguments for and against either policy are found cited in every text book on Economics. It is not, therefore, proposed to go over that well-trodden ground once more, and the arguments in that controversy will be referred to incidentally only so far as that is necessary to provide the background for our main work which consists in tracing economic theory and studying its application in the conditions underlying and surrounding the organized industries of India for which protection is thought suitable and indispensable.

To define the scope and the purpose of these lectures, it may be further stated that it will not be relevant to our object to recount the history of the fiscal policy of the government in India nor to give an elaborate description of the various industries which have received protection or have been denied state assistance for one reason or another. Within the limits thus prescribed, there is, however, ample room for the investigation of causes which influence the cost of production in the industries concerned and render competition with foreign commodities unprofitable, and illustrate the working of economic laws which may not be apparent to the business man, much less to the man in the street but which are the stock in trade of the economist. No ardent student of economic science would fail to be delighted at the discovery at every turn in the course of the enquiry that the leading theories of his special discipline are explained and confirmed by the actual experience of industrial organization and development.

It is of importance to note at the very outset of our enquiry that there is an annoyingly wide divergence of opinion among leading exponents of economic doctrine regarding the very aim, the subject matter and the method of our science. According to a well-known old school of thought, which is not lacking in supporters even at the present day, economic science has absolutely nothing to do with national policy, the determination and adoption of which is the work of statesmen and politicians. This attitude is perfectly correct so far as it means that the economist, as a scientist, must refrain from taking sides in the day-to-day controversies in a spirit of partisanship and that any mixing up of economics and practical politics is detrimental to the scientific character of the work of the impartial searcher for truth in the domain of economic enquiry. But economics will lose all its practical utility if it were to be restricted to the enunciation of pure theory and were not to indicate the correct lines that individuals and communities must follow in order to attain their aim viz. securing the well-being of individuals, nations and humanity as a whole. Pure theory itself is evolved from practical social life and has thus a direct bearing upon the past, the present and the future of communities. For the sake of convenience it may indeed be necessary to keep theory apart from practice, but the former will be of no use unless it assists in formulating views and policies with respect to the future. In fact, from Adam Smith down to the present time, economists have always taken up determined attitudes with respect to the problems of the day, and statesmen and politicians have acted upon the expert advice of economists in important matters. Discussions of the legitimate and the proper policies of the state with respect to labour conditions, currency, banking, free trade and protection, land tenure systems, taxation and so forth, are found in all leading text books on Political Economy. It is one thing to hold that economic life is not the whole life of an individual or a community and that it can not dictate what ought to be and what ought not to be done, thus usurping the place of ethics and politics; and another to debar economics from pronouncing judgment on practical affairs in relation to its own special point of view. Being a social science, economics must not be confused with and reduced to the position of the natural sciences. It is admitted on all hands that the subject matter of economics is human wants and the manner of satisfying them, and economists would be failing in their duty if they contented themselves with merely studying how social and economic activities have developed in the course of the evolution of civilization and do not, at the same time, show how these same activities may be better directed so as to prove more effective in fulfilling their purpose and further indicate how mistakes may be avoided and correct lines of action may be chalked out.

It is gratifying to observe that the above view is finding increasing favour with economists. The function of science in relation to social economic policy is, according to a leading thinker, three-fold[1]. First, it is to ascertain the efforts of individuals, corporations, public bodies and official circles at changing and developing existing economic conditions, to investigate the importance of these interests for the community and to enquire into the connection of the above efforts with the political and the economic constitution, the legal system, the customs, the ideas and the education of the people, in short, the whole cultural system of the nation. The second function of scientifically considered economic policy lies in the investigation of the effects of the changes which have already taken place or of those that are proposed for adoption, to ascertain the injury or the benefit that these are calculated to result in and to offer a measure for judging how far economic policy will conform to general well-being. Here, economic science has no end of its own to suggest; and it only seeks to find out how far the attempts and aims of various social bodies, including the state, are designed and expected to prove beneficial or otherwise. Scientific discussion of policy goes further, and that is its third task, and presents its own idea as to the proper lines of economic development, basing its judgment upon a critical examination of the economic circumstances in relation to the facts of social cultural life as a whole. Economic judgment thus scientifically framed, may, of course, some times run the risk of being coloured with personal predilections and prejudices in the absence of definite standards of social philosophy and morality. At any given time and in any given country, however, there are, in large spheres of social life, such standards of conduct available, and the economists' opinions have to be formulated in relation to these. It is often argued that economists themselves are divided as to which is the best policy to be followed by a nation in given conditions, e. g. free trade or protection? And this is taken to demonstrate the futility and the unscientific character of the counsel given as regards the measures that should be adopted by a government or an institution in relation to economic development. But are economists unanimous, and have they ever been unanimous, with respect to theories themselves? This difference of view has not, however, prevented them from carrying on their work and building up their science. Economic theories which have no relation to the realities of practical social life, are mere metaphysical abstractions which are, properly speaking, out of place in a social science which has to do with human life as it is actually lived and will be lived. Economic policy will vary according to different conditions and ideals, and theory must prove helpful in devising it.

---

[1] Eugen von Philippovich: "Grundriss der Politischen Oekonomie," vol. II.

Theory is, after all, a statement, based on observation, of the conception of the regularity with which certain things happen in relation to one another and the manner in which they are likely to happen. But life is perpetually changing, and a theory which is based only on static conditions, is inevitably bound to go wrong, and its importance will be restricted to the assistance it can render as a formal instrument of thought in its application to given conditions. Free trade and protection are not, therefore, dogmas with universal and perpetual validity. It is further interesting to reflect that, as is well known, even the theories of the older abstract economists were based on and coloured by the political and social conditions which surrounded them and the ideals which they had set up for themselves with the background of a certain philosophy behind them. Adam Smith was conscious of the relativity of the doctrines he formulated, and the national policy he favoured, was, therefore, dependent on the particular conditions in which it was to be applied. In the hands of his followers, however, the theory assumed a rigidity from which it took the later thinkers a good many years to rescue it. Even Ricardo, be it noted, had an eye to the practical, and his mistake lay in confusing the accidental with the universal. What was true of England and suited the needs of her people was set up as a general proposition, and in the hands of the classical economists, economic law became natural law. Adam Smith had a wider vision, and was cautious in his generalizations to which he was inclined to admit exceptions. Under the influence of the conditions that immediately surrounded them and of the philosophy which then held sway over the public mind, the early English economists built up a strong individualistic conception of economic activities, making the self-interest of the individual the pivot round which the economic organization revolved. Self-interest, freedom of action from every kind of restriction and open

CSL

competition became the watchwords of the English school of economic thought and its followers on the European continent. The state and the community had, for all practical purposes, no existence in their thoughts and they took no account of them. If every one pursues one's own interest, as one would ordinarily do, the interests of the whole would be automatically served, and the interference of the state or any one else would be a nuisance rather than a help. Society was only a bundle of individuals who transacted business with one another on the principle that it suited them best and that division of labour which ensued, was the most economical and beneficial to all concerned. The wider the area of freedom and the more extended the division of labour, the better for the production and exchange of wealth. This attitude represented, in the beginning, a reaction against the mercantilist practice of state patronage, regulation and restriction which hampered all progress. But the exaggerations and abstractions, the one-sidedness and the narrowness of the Ricardian school soon evoked attacks from various quarters, and the weak points in their system were exposed by critics who adopted different standpoints from which to consider the problems of economic life. The ethical, the socialistic and the historical schools attempted the work of destruction and construction in their own way, and though a few thinkers in every country may be found to-day still carrying the banner of the classical school, the importance of recognizing and taking account of the social aspect of economic activities has been widely acknowledged. In fairness to the founders of poitical economy it is indeed admitted, and admitted with gratitude, that the method of isolating economic phenomena from other phenomena followed by them, had its own use, but it was correctly pointed out that they had gone too far in turning the social science into a natural science.

In spite of the differences of opinion that prevail to-day in respect of theory and even of the fundamentals of economic science, it may be safely maintained that there is a growing agreement on certain important points which are particularly relevant to the subject of these lectures[2]. In the first place, it is noted that the economic activity of the individual is the activity of a person who is a member of a community and is, therefore, influenced, conditioned and coloured by motives and modes of action which are communal and national. Secondly, though the individual and the purely economic aspect of life may be usefully isolated for purposes of closer study and the working out of a hypothesis, economic science would be a barren display of logical subtleties, mere metaphysics, and would have no relation to realities unless the other sides of life which are indissolubly bound up with the economic, such as the legal, the ethical and the political, are properly considered and correlated. The 'economic man' must, consequently, be replaced by the citizen who is a product of history and who has rights and obligations not only as a businessman but as a member of a family, a community and a state. Thirdly, man can not be regarded as a slave of nature or instinct as he can control and regulate forces working from outside. His action can, therefore, be purposeful, and he can modify the conditions of existence according to his ideals and needs. Economic science is here sharply distinguished from the natural sciences which have to do only with forces of nature. Fourthly, as economic life is life lived within society, the influence exercised on it by custom, laws and administrative methods, has to be given due weight. Fifthly, the power of the state in moulding the destinies of a people has to be taken into account. In the conflict of interests which is inevitable among different classes, sections and divisions of society, it is the state which represents the community as a whole and has the important part to play of adjusting the opposing claims and directing the flow of social life in such a way that the maximum of well-being may be secured to all. Lastly, it follows, therefore, that economic theory and practice can not be separated as if they were not parts of one whole science whose chief purpose it is to study actual life and judge the development of civilization from its own particular point of view in correlation with other forces and proceedings working in a complex society. We can not do better than sum up the position in the following words of a discriminating writer :—

---

[2] See the Author's "Economics in India," Presidential Address delivered to the Indian Economic Conference, at Mysore, in January, 1929.

"We can not remain content only with the formulation of economic theory because it will merely explain to us the principal phenomena of economic life and their connection with one another as well as the social organization in which they are seen. We must reach the manysidedness of life and investigate the changes which are produced in the economic phenomena in general under the influence of ethical and historical forces. Indeed we have to do more. We must not be satisfied with the mere knowledge of economic events but must likewise aspire to make use of it for deliberately influencing economic life. One is ever confronted with this latter task in each province of study because science has not only to quench thirst for knowledge but has to contribute to the betterment of human life. This requires the handling of economic problems in a manner different from that of theoretical discussion. The aim of all theory is pure knowledge and it is important in each social science to preserve this aim free from secondary considerations. The regulation of economic life is, however, impossible unless there are standards by which to judge the value of things as that life can not keep to the correct lines without such standards and decisions as to what is desirable and what is detrimental. Therefore must theoretical economics have a second section of science where the working of different aims and possibilities on economic life must be judged in the light of the results obtained from threoretical enquiry. This is called economic policy or practice. This side of economics has to offer to us the knowledge that will qualify us for judging the merits of actual economic life".[3]

This is a very fair statement of the true aim, scope and value of economic science which rises above the animated controversies that are being carried on even at present on the subject and are reflected in the variety of names that are supposed to be appropriate to its subject matter and scope viz. Economics, National Economy, Social Economics and Political Economy. Let us now consider the bearing of the above exposition on the theme we have immediately in hand i. e. protectionist policy. There are two propositions which can be reasonably laid down here as established: first, that the province of economic science covers theory and also policy; and second, that policy will vary according to different conditions in which it is to be adopted, in as much as there are no natural laws in economics which have a universal application. If the truth of these propositions is denied, economics will be debarred from pronouncing judgment as to whether free trade or protection is suitable in given conditions, and one uniform practice and theory will have to hold good of all countries and at all times, the discussion of the suitability of proposed measures to be taken by the state for the promotion of the well-being of the community being absolutely precluded. That the special business of economics is to discuss and recommend the most efficient methods by which individuals and nations can secure the maximum of satisfaction through the production and acquisition of goods and services, is admitted on all hands. The difference of opinion arises with regard to the correct methods. While those who are opposed to state interference in voluntary economic activities of individuals, contend that freedom of exchange through which the circulation and distribution of wealth are rendered possible and production is also stimulated, is indispensable to the attainment of the aim, the advocates of protection hold that freedom may be a suitable instrument of prosperity in certain definite conditions but that it is bound to prove a powerful cause of stagnation and decay unless it is regulated by the state in the interests of all. The idea of unrestricted individual freedom and of the state confined only to the performance of police duties, is no longer held and given effect to in its naked form, and even in countries like England, the province of the functions of the state has been considerably widened. The state is an organization which maintains the integrity of the whole community and confers rights and imposes obligations on its members. National solidarity is guaranteed and communal well-being is secured by the state which has thus to perform the function of intervening in conflict of interests and of protecting the weak against the strong. Capitalists and workmen, landlords and tenants, creditors and debtors and producers and consumers represent the varied material which is moulded into the community and which is cared for by the state. There is, of course, a limit to the functions and the interference of the state whose powers may some times be abused but the possibilities of whose beneficent activities can not be ignored or belittled. The supporters of undiluted free trade in and outside a country pin their faith to the advantages of unrestricted competition and exchange, but there is always the risk of this freedom being exploited to the detriment of the weak. In internal trade and competition there is the state to correct the inequalities and prevent injustice. When the exchange, however, extends to other nations and results in exploitation, where is the supernational or universal authority that will prevent evil effects ?

---

[3] Wolfgang Heller: "Theoretische Volkswirtschaftslehre".

It was List's valuable contribution to economic thought to bring to light this glaring defect in the superstructure reared by the English economists and he focussed attention on the necessity of giving the state and the nation their proper places in the correct system of economic theory and practice. In his hands economics became a system of ' national political economy.' He agreed that Adam Smith's ideas were perfectly suited to the conditions and requirements of England whose economic development had reached a stage in which freedom of imports and of competition was indispensable and beneficial. " If I were an Englishman," he said, "I would support the free trade policy of Englishmen because it subserved their interests best, since they needed wide markets for the disposal of their manufactures and large sources of the supply of raw materials and food. But Germany and France were in entirely different circumstances, and free competition would have been a stumbling block in their path."

GSL

Adam Muller had before him started an identical line of attack against Adam Smith's way of reasoning and List was indebted to him for the original conception of 'productive power', true wealth and prosperity and interdependence (as a substitute for competition). List went much further than Muller and laid special stress on the political aspect of national life. He joined issue with Smith with respect to the latter's idea of national wealth. According to him, it is not the piling up of exchange values or the production of material goods: a nation's wealth consists in the power to enrich the sources of production and in the capacity to produce that wealth. The individual merchant may accumulate private wealth in the shape of exchange values, but for the nation, it is the sources of the creation of that wealth that are vital. These sources consist, besides the material factors of production, of intellectual capital, of arts and education, in fact, of all those elements that go to make up culture. He says in one place:—"The object is not to gain matter in exchanging matter for matter as it is in the individual and cosmopolitical economy, and particularly in the trade of a merchant. But it is to gain productive and political power by means of exchange with other nations or to prevent the depression of productive and political power by restricting that exchange". He wanted the state to use all its political power to encourage the many-sided development of the people; and agriculture, industry and commerce were all to be simultaneously promoted. It was England's political power, her navy and her colonies, that enabled the English nation, in its manysided strength, to benefit by free international exchange and competition.

The ideal of List and of economists of his way of thinking is the harmonious development of the different branches of the life of a nation, and agriculture, manufactures, commerce, shipping have all of them their proper places assigned. He says in one of his writings:—" We consider all the branches of national economy together as organized limbs of one body, we consider the whole as well as the individual parts, such as industry, agriculture, trade, shipping as constituent parts of the nation, which are the very essence of the nation even as much as its political administration and the system of military defence; in the regulation of these elements as of the others, the whole past, present and future of our nationality and our relations towards other and great national communities are to be considered."[4] The above ideal of a well-organized and systematically developed nationality, is fundamentally opposed to the individualistic and cosmopolitan conception of natural laws automatically working for the good of humanity. The latter system assumes that competition, which means the elimination of the weak and the unfit, will, some how or other, lead to a wholesome readjustment by the mobility of labour and capital and the transfer of these to places and industries where they will be remuneratively employed. The mobility assumed, is in many instances, imaginary, and the readjustment left to be brought about by the forces of supply and demand in the world market, is a painful process which is calculated to end in the poverty of weak nations and their growing helplessness. So long as there is no world nation and world state and the losses and gains of one part of humanity are not the losses and gains of other parts, the advantages of free international competition and division of labour may prove illusory. This is the secret of persistent and deliberate efforts of states to safeguard their people against competition that they regard as undesirable. And Great Britain is no exception to this rule as post-war measures taken there by the national government to readjust the national economic machinery to the requirements of the new situation clearly show. This is then the general background of the picture of the economic ideas and policies which prevail to-day; and it will be our next task to study more closely the theory of international trade, division of labour and competition, which is supposed to be the basis of the policy of free trade and protection.

---

[4] **Artur Sommer: "Friedrich Lists system der Politischen Okonomie".**

CSL

II

INTERNATIONAL TRADE.

The subject of international exchange has always been regarded as of sufficient importance to merit special treatment in text books, and separate volumes have also been devoted to its discussion. It is believed that as trade crossed national boundaries, new forces came into play, and problems relating to money, prices and income assumed shapes which were different from those met with in a purely national economy. Mercantilist thinkers devoted much of their attention to foreign trade in developing their theories of money and balance of trade. International exchange played an important role in the discussions of the classical economists through the formulation of their theories of value and division of labour. With the growing improvements in the means of communication and transport and the increasing mobility of capital and labour, nations have steadily been drawn into closer contact with one another, and international relations have become more intimate and complex. The interdependence of nations has grown, the volume and the variety of imports and exports have continuously expanded, the markets for certain goods have widened with remarkable rapidity, and the banking and monetary systems of the nations of the world have become interlocked in a manner that could not have been thought possible a few years ago—in short, the position as regards the relations of nations with one another has so materially altered that an independent study of the problems presented by it, has come to be looked upon as an indispensable and a fruitful discipline for the student of economic science. It may at once be admitted that the claim made on behalf of this specialized line of investigation is perfectly justified, and the literature that has already been published on the subject, makes a valuable addition to our knowledge of economic facts and tendencies. Equally valid is not, however, the proposition that 'world economy' constitutes a science which has its own laws different from those of economics as it is at present taught. A moment's consideration will show that international phenomena do not essentially differ from the national, and do not call for the formulation of different theories. That this view of the matter is neither unfair nor inaccurate, is demnostrated by the definitions of world economy that are given by its leading exponents. "World economy" we are thus told, "is, on the analogy of national economy, a union of classes and interests which are held together by mutual economic intercourse extending over the whole earth,[5]" or that it is a "comprehensive idea of the relations evolved through highly developed forms of intercourse and governed by international agreements effected by governments and also the exchange relations between the individual economies of the world[6]." We are, therefore, driven to the conclusion that world economy is not an independent unit comparable to national economies, and that the latter do not stand towards the former as different ingredient parts of a nation stand in relation to the national economic organization as a whole. There is an organic unity in the nation which is absolutely lacking in the relations of nations towards one another, however intimate they may be.

We have, therefore, to examine how division of labour and exchange take place within a nation or a community which, for this purpose, may be regarded as a unit and how exchange between individuals and groups within them work to the advantage of all. In every advanced community men have learned by experience that they can secure a better recompense for their effort at satisfying their wants if, instead of directly making all the things they need and thus becoming self-sufficient, they restrict themselves to the making of those things in the production of which they have a special advantage and for which they have a special aptitude, and obtain from others goods and services with respect to which the

---

[5] **Sartorius von Waltershausen :** "Weltwritschaft."

[6] **B. Harms :** "Volkswritschaft and weltwirtschaft."

CSL

latter are similarly circumstanced. Special professions and trades thus arise, and within each occupation also a similar division of special work arises. This division of labour results in the economy of effort and materials, which is beneficial to all. The exchange of products would not take place unless the parties concerned in it feel that they secure greater value than they have to part with in the transaction. What is true of individuals and classes is true of geographical and administrative and political units in a country. As each member of the above groups may be supposed to act on the economic principle of trying to obtain the maximum of satisfaction with the minimum of sacrifice, the competition that will be set up among them, will result in enhanced efficiency, the lowering of cost and the increase of net gain to individuals and the whole community. As money is used in effecting the exchanges, the value of products and services is determined in the market by the state of supply and demand; and the remuneration which the different classes obtain for their labour and sacrifice, is ultimately determined by the action on each other of supply and demand in a similar manner. This is a simple and elementary statement of the economic process by which wealth is produced and exchanged in a community which is an organization whose members are bound together by other ties along with those of the mutual economic relations described above. The reality is, of course, much more complex than the simple picture presented here, but the bare outline will serve the purpose we have in hand and we can make a nearer approach to our main theme by extending the bounds of the national economic activities so that they touch other communities and nations.

The canvas is now bigger. The farmer and the manufacturer find an outlet for their goods in outside markets, the division of labour is extended and prices are fixed no longer according to the local relation of demand and supply. But the underlying principle has not materially altered. The division of labour and the localization of industry rest upon differences in natural and acquired advantages. First of all, there is the special advantage conferred by nature in a country in the way of climate, soil and the store of minerals. The suitability of the land for the production of cotton, tea, jute and sugar-cane in tropical countries and the deposits of coal, iron and oil elsewhere, constitute the special advantages which can become the basis of a mutually profitable exchange. Education, scientific and technical knowledge and possession of ample capital as also economical means of transport are conditions which place the people of a country in a position of superiority which enables them to effect a favourable exchange. All those causes which bring about a division of labour within a community, and render it ultimately beneficial to all, become more effective when they are extended to a world economy owing to the sharper differences of geographical and cultural position, though the unity of interests is not quite as perceptible in world intercourse as it is in the economy of an individual nation. The superiority of a factory, a locality, or a province of a country in any industry or industries, rests at bottom, on the relative low costs with which commmodities can be placed on the market. Prices are determined in the world markets, as in national markets, by the costs of the marginal supplier, and those producers will have a superior advantage in competition who can bring forward supplies that are produced at costs that are well within the margin. It may be possible for a community to be able to carry on all kinds of industries, but it will have a special advantage as ragards low costs only in certain branches, and in an international competitive market, the community will have to give way to other communities in some industries while holding its own in the commodities which it can turn out at lower costs than its competitors. Each district and province in India, may be self-sufficient as it is capable of producing the necessaries of life and the comforts which its people need, but there is still an inter-district and inter-provincial exchange which is caused by the relative superiority possessed by localities in the matter of certain products. And the easier and the cheaper the communications, the greater is the magnitude and the variety of

CSL

the goods that become the objects of the exchange. The underlying principle which explains the phenomenon of international exchange is then the same as that of internal exchange.

Is there a theory of international trade which is different from the theory of national trade ? This would appear, from the foregoing, to be a superfluous question to ask. The answer would obviously be 'no'. The subject can not, however, be dismissed so summarily in view of the endless discussion that has taken place on the question and the uncertainty which appears still to surround it. The trouble began with Ricardo's formulation of the labour theory of value and continued to haunt the minds of thinkers who imagined that there is a dyarchy in the realm of economic conditions and two different rules prevail over internal and international conditions. Two theories are consequently needed to explain the two-fold phenomenon, and hence a separate theory for international trade. Some are of opinion that the latter is only an application of the regular theory of value and exchange viz. its extension to world economy. Ricardo's theory of value is essentially a cost of production or rather a labour theory, since rent was eliminated from cost and profit and wages were supposed to stand in a constant relation to each other. This theory of 'natural' price is based on the assumption that mobility of labour and capital is unrestricted and that competition is perfect; and in such conditions it is supposed that goods would exchange with each other at a price that represents the relative quantities of labour contained in them. If two commodities have each cost one hundred days' labour they must exchange with each other, and if temporarily there is a departure from this equilibrium, it will be immediately corrected by the force of competition which will equalize profit and wages. This was all a hypothesis ; but by the process of refined abstraction, Ricardo converted it into a reality and a general truth. He, however, came up against a serious difficulty when he began to consider how prices are fixed in international exchange. The law of value which holds good in the case of internal exchange in any

CSL

given country, does not apply to the value of goods which are exchanged between two countries.[7] Mobility of capital and labour is lacking in this instance and the force of competition does not work to bring value to the cost of production. To take the classical example, a quantity of cloth produced with hundred days' labour in England will exchange for a quantity of wine also produced with hundred days' labour; but it is possible for goods which have cost hundred days' labour of Englishmen to be exchanged for eighty days' labour of Portuguese workers. A quantity of cloth, let it be supposed, requires 100 days' labour and a certain quantity of wine 120 days' labour. The same quantities of the two commodities require in Portugal, 90 and 80 days' labour respectively. Now, if England exchanges her cloth for Portuguese wine, the wine would cost her 100 days' labour embodied in the cloth exported, instead of 120 days' labour as if the exchange had been internal; and there is here a saving of 20 days' labour in the transaction. On the side of Portugal also, there is a similar advantage and a saving of 10 days' labour. It is not, therefore, the cost of production in each country that has here determined value but the cost of the article which has been given in exchange. This law is the law of comparative costs as distinguished from the law of absolute costs which governs internal exchange. J. S. Mill, who developed this theory further, has put the matter thus :—"The values of commodities produced at the same place, or in places sufficiently adjacent for capital to move freely between them, let us say for simplicity, of commodities produced in the same country depend (temporary fluctuations apart) upon their cost of production. But the value of a commodity brought from a distant place, especially from a foreign country, does not depend on its cost of production in the place from whence it comes. On what then does it depend ? The value of a thing in any place depends on the cost of its acquisition in that place, which, in the case of an imported article, means the cost of production of the thing which is exported to pay for it."

---

[7] H. Weigman : " Kritischer Beitrg zur Theorie der international Handels."

Mill, following Ricardo, adopted this dualism of the theory of value to reconcile the phenomenon of international exchange with the cost-of-production theory to which both of them clung tenaciously. But Mill caught a glimpse of the true and more acceptable modern theory of value, which satisfacterily explains the phenomenon both of internal and external exchange, when he proceeded to consider the point at which value in international trade came to be fixed. The equilibrium which subsists within a country between demand and supply, is disturbed when foreign trade makes commodities cheaper and the demand for them increases; and the question arises where will the new equilibrium be established and how will the advantages of trade be shared between the exchanging countries? Mill answers the question by saying that "the exchange value of these commodities relatively to each other will adjust itself to the inclinations and circumstances of the consumers on both sides, in such manner that the quantities required by each country, of the articles it imports from its neighbour, shall be exactly sufficient to pay for one another," and goes on to add "that the limits within which the variation is confined, are the ratio between the costs of production in the one country, and the ratio between their costs of production in the other." Here we see once more the dualism of the sets of conditions of competing and non-competing groups and the corresponding dyarchy of theories. On the one hand, value is determined by the 'inclinations and circumstances of consumers' and on the other, by the 'ratio between the costs of production.' According to the classical theory, the influence of demand on price is only transitory, and price always returns to the cost of production which is its cause and measure. This does not, however, appear to apply to value in international trade, and therefore the influence of demand on price has to be enquired into. The law by which the adjustment of price is governed, is stated by Mill to be the law of the "equation of international demand" and runs as follows :—" The produce of a country exchanges for the produce of other countries, at such values as are required in order that the whole of her exports may exactly pay for the whole of her imports."

This law of international values is also called the equation of supply and demand, which is otherwise expressed as the law of 'reciprocal demand.' But the explanation Mill gives us of the manner in which the advantage of the exchange is divided between the countries, in accordance with this theory, does not carry us very far, as he still adheres to the cost theory of value with respect to internal prices and recognizes the influence of demand only so far as it affects the quantities of the commodities exchanged. "There are two senses in which a country obtains commodities cheaper by foreign trade: in the sense of value and in the sense of cost," says Mill and proceeds to observe :—" What her imports cost to her is a function of two variables: the quantity of her commodities which she gives for them, and the cost of these commodities. Of these the last alone depends on the efficiency of her labour, the first depends on the law of international values, that is, on the intensity and extensibility of the foreign demand for her commodities compared with her demand for foreign commodities". Unnecessary confusion has been caused here by the insistence of the classical economists that the influence of demand is exerted in international trade as it is not in internal exchange where production costs alone predominate. The value of a commodity obtained by means of exchange is said to depend on the relative quantities exchanged and the cost of producing them in the respective countries. This is, however, equally true of internal exchange since there also the price equilibrium is established on the relation between demand and cost, though the relation is not so obvious. In fact, all value is governed by comparative marginal utility or demand or comparative marginal cost which means 'reciprocal demand,' which is the same thing as comparative costs. In internal as well as external exchange, it is the comparative advantage conferred by the transaction that induces persons to exchange objects or buy and sell, and it is not essentially absolute but relative advantage that is the foundation of all exchange.[8]

---

[8] **Seligman : " Principles of Economics. "**

CSL

If the difference in cost or advantage, is absolute, excahnge is, of course, bound to be fruitful of satisfaction to both the parties. Exchange of services between a professional man and an artisan, for instance, is an illustration in point. Similar is the case of trade between the manufactures of western nations and the special raw products of tropical countries. Such absolute difference in utility or cost, is not, however, essential to exchange, which will take place if it secures to a person greater satisfaction to part with an object in favour of another. When two parties or two countries find themselves in a position to gain an advantage, they will be willing to exchange. How much surplus satifaction each will secure will depend on the relative degree of satisfaction, or, which is the same thing, relative sacrifice. This is the elementary law of value to which the classical economists were strangers, and they took little or no account of utility or demand in relation to the available supply in framing their law, and their theory consequently became one-sided. They plumped for labour or cost of production as the cause and measure of value, and the law of marginal utility was formulated at a later stage. The bearing of this fact on the theory of international trade is that they applied the law of comparative cost of production only to the theory of international trade. The assumption that there is perfect competition within a country while it is entirely lacking in international trade, is arbitrary. Capital and labour can not be easily transferred even within a country from one industry to another, and there are non-competing groups to be found there. A special theory of international values is, therefore, superfluous. As a matter of fact, that same theory which is supposed to apply in an exclusive manner to trade between countries, is essentially the law of all value and exchange.

The above discussion of the theory of international trade is calculated to demonstrate clearly why and how a division of labour arises as between different countries and why it is found to be advantageous to all. The superiority which an industry enjoys in a given market, is due to two things: the cost at which a commodity

CSL

is produced and the quantity that can be placed on the market. Mere low cost will not give an industry an advantage over its competitors unless the supply is sufficiently large to exert influence on world economy. A country utilizes to the utmost the industrial superiority it possesses in certain branches of its economic activity so that the resulting benefit spreads to the whole world economy. The principle on which this happens is called the principle of the "stratification" or "gradation of the supply or of the market."[9] When the country throws on the market cheap goods which it has produced at the lowest costs owing to its superior advantages of production, it is able to obtain cheap other commodities in which it enjoys no such advantage. Thus does the difference of grade in the conditions of production give rise to external trade and is the means of increasing the economic productivity of the country concerned. The price in the world market has a tendency to be governed by the lowest cost of production, and those countries are in a position successfully to compete, whose costs of production lie well within this limit. The superior advantage of a country thus lies in its ability to provide the market with the largest portion of its supply with goods produced at costs which are away from the margin. The larger this quantity and the lower the cost at which it is marketed, the greater the profit to the industry and the country concerned. Take as an illustration the glass industry. There are, in India, a good number of glass factories which find it difficult to compete with rival imported goods. A country say, Germany, covers a large portion of the Indian market with cheap glass-ware and can control the prices and the supply, and the benefit to that country is consequently considerable. Thus is explained the predominance of western nations in the Indian market with respect to several industries.

It is needless to point out here how the foreign trade and the industries of a country are intimately connected. The degree of the closeness of this relation, of course, varies from country to country. The poorer a country is, the smaller is the volume of its foreign

---

[9] Schuller : "Schutzoll and Freihandel."

CENTRAL SECRETARIAT LIBRARY
(IND-1040)
GOVT. OF INDIA

7191

MINISTRY OF CULTURE · GOVERNMENT OF INDIA
GSL

trade. Its purchasing power is small and it has few industries the products of which it can offer to the outside world with advantage. Newly settled countries and colonies may have, however, a comparatively large external trade in raw produce in view of their small population. India's *per capita* foreign tarde is barely Rs. 20 a year, which is nothing compared to the corresponding average for even small western countries and their colonies. However small India's trade, it has considerable significance from the point of view of the country's national industries. The imports of cheap foreign manufactures for which demand in India is steadily growing, are powerful competitors before which indigenous enterprise has little chance of success. It may be urged that the present division of labour, in which India sends out her special exports in exchange for foreign manufactures, need not be disturbed and that neither this country nor the outside world is likely to gain by a change. It may be pertinently asked, therefore, "How is it that in the face of the unmistakable implications of the theory of international trade, almost all countries of the world are seen to put obstacles in the path of the free flow of foreign trade?" Everywhere one sees high tariff walls raised against the imports of commodities coming from abroad, and even the events of the post-war years have made little change in the situation. There is a good deal of talk about the necessity of removing restrictions on world's trade but there is hardly any action worth mentioning. Revenue duties imposed on foreign imports are avowedly intended to throw the tax burden on the consumer and are deliberately kept at a low level. In all countries except Great Britain, they are sufficiently high and are deliberately meant to keep off foreign commodities and minimise external competition in favour of home manufactures. How can this anomaly be explained? What has economic science to say in the matter? Or, is the function of the science ended when it has laid down its theory regarding international trade and has nothing to do with the policies which governments may choose to adopt in economic affairs?

The answers to these questions depend on the view that is taken of the aim and scope of economic science itself. Even when

CSL

the science is severely restricted to the task of only investigating the economic activities of men and groups with a view to discover if there are any general principles underlying them, economics would not be precluded from studying the policy of states which restrict the free flow of trade between countries and attempt to control the activities of individuals, and explain the causes and the consequences of such action on the well-being of nations and mankind generally. The conclusions drawn from such scientific enquiries would be valuable whether they are found acceptable or not by nations and governments, for reasons which are not strictly economic in their import. This is indeed the helpful and the indispensable contribution to the discovery of truth and the progress of humanity that may be expected from the scientific workers in the field of economics. Looked at from the definitely economic point of view, viz the principle of minimum sacrifice, the unrestricted competition of manufacturers and traders with one another at any given moment, may be found to be detrimental to their own interests in certain conditions. It is now a common ground among economists that conditions of economic life have to be studied both from the static and the dynamic point of view. Long period and short period changes have to be separately studied, and the results are found to be instructively different. The classical economists confined their attention to the phenomena of the moment and generalized from them. Many of their theories have gone wrong on account of this defect in their outlook and method, and they have now been declared to be crude and unfruitful. Labour theory of value, Malthusian law of population, the iron law of wages, the wages fund theory are pertinent examples. It was, for instance, assumed that the productive capacity of a community was some thing fixed, and that when as a result of foreign trade, a new division of labour was occasioned, all that happened was that capital and labour were transferred from one industry to another and that this transfer was not only practicable and natural but beneficial, the best that could happen to the community concerned. Mobility of capital and labour and free competition were likewise taken for granted. Now, a moment's consideration of the rapid changes which are occurring all round in India in relation to capital, labour and consumption, is enough to convince one that a theory which generalized about them, on the basis of the older economists' outlook is bound to be hopelessly out of tune with the realities. The schemes of labour and social insurance and the varied legislation in the interest of workmen and consumers with which we are only too familiar, prove that taking of long views and the incurring of present sacrifices for a future good, are regarded as conducive to the best economic interests of the community. The answer to the question as to why governments all the world over are interfering with the unimpeded flow of international trade, will be found in their conviction that the so-called natural individual liberty and free competition do not benefit them and the communities they represent in the manner expected. It is not, however, only political powers that take this view under the influence of non-economic motives; scientific economists are seen to support the policy from the point of view of their own science. The correct decision in this matter turns on whether economic science is to concern itself with the individual as an atom working under the influence of the impulse of self-interest and guided in his economic activities entirely by this motive or it has to deal with an organized society the members of which are associated with one another as constituent parts of a united whole which has a distinctive ideal, culture, laws and government. The mechanical conception of the activities of the individual and of society has been consequently abandoned as a fiction and an unreality and has been replaced by the idea of a social organization, conscious, living and progressive, deliberately adjusting the economic forces to the needs of changing conditions. Economic life has been assigned its proper place by the side of and in association with the other sides of communal life.

The admission of the interdependence on one another, of the different parts and interests in a nation, the possibility and the desirability of measures to ensure the good of individual groups through the safeguarding of the interests of the whole and the necessity of considering economic problems in relation to their bearing on other sides of national progress, and therefore, the examination of national policy from this wider point of view, all follow in logical course. The government, as the proper representative of the community, is obviously expected—and it is an obligation which its position throws upon it—to take suitable measures to correct abuses which result from inequality, unfair and ruinous competition and the maladjustment of social and economic forces and likewise to follow a positive policy of encouraging the development of the natural and the other resources of the country through such legislative and administrative measures as may be considered suitable. The community and the nation and not the individual or the separate class and interest, is the centre and the pivot of thought and discussion. It is not 'private economy' and 'world economy' but social and national economy that is the subject of the economist's study with reference to his special discipline. The relation of the economist towards economic life is not like the relation of the grammarian towards language. And a theory divorced from practical life is empty speculation. Neither free trade nor protection is based on a theory that has eternal and universal application. It is interesting to remember that Adam Smith, the founder of English political economy, correctly appreciated the relativity and realism of economic doctrines and recognized definite exceptions to the general rule that the state should not ordinarily interfere with individual liberty in economic activity; and J. S. Mill also felt inclined to make concession to protectionism. Recent tendency in England is clearly for the state to interfere, in the interests of the nation, with the normal economic machinery with the object of restricting imports, stimulating the development of home industry by means of financial assistance, seeking to counteract the influence of foreign competition on national industries and subsidising emigration of unemployed workers and even to think of taking the coal industry under public control. Imperial politics in its economic aspect, the development of the production of raw materials within

CSL

the empire, preference given to empire products in the British market, the preference shown to British manufactures in the Dominions, and special measures taken to improve inter-imperial communications, are all significant indications of the change that has come over British economic policy in recent years in connection with economic thought and action. It is a convincing demonstration of the truth of the proposition that each nation has to adjust its economic policy to changed conditions and that there is nothing eternal about economic doctrines. In fact, all this confirms the correctness of the view advanced above relating to the true scope of economic science and its connection with problems of national well-being and progress. England's position is economically speaking, peculiar. For her prosperity she requires, like few other nations, wide external markets for the disposal of her manufactures and an open door for admitting cheap and plentiful supplies of raw materials and food. A radical change of practice and policy and orientation is not, therefore, to be expected here. It is all the more remarkable, for this reason, that even liberal economic thought is showing signs of unmistakable modification. A writer who has made a detailed and careful enquiry into this question, sums up the results of the study by pointing to three important directions of the change which has taken place in England : 1. the individualistic constitution of English economic organization is being replaced, in a growing measure, by an organization in which the principle of concentration is assuming increasing importance. Free competition which is the very soul of the Liberal conception of beneficent economic liberty, is becoming less effective and concerts, agreements, combinations, cartels and trusts, with all their implications and consequences, are coming into prominence. 2. The attitude of the majority of people in matters economic is no longer the outlook of consumers but is becoming more and more that of producers. And that is a revolutionary change indeed. 3. Claims to protection for the existing standard of living, are being advanced from every side. This is evidenced by the fact that in the post-war period of prolonged industrial depression and a large volume of unemploy-

CSL

ment, there has been no appreciable reduction of the wages of labour in any of the leading industries of the country.[10]

While it is true that there is no special theory either of free trade or of protection because the first would ignore the existence of independent nations and the second would have to adjust itself to different policies and aims which are incompatible with the fundmental economic motive, it would not be correct to hold that protection is, in all conditions, indefensible on purely economic grounds. As one author[11] has put it, normal motivation is a thing quite different from the deliberate setting up of a particular motive, with which economic theory would, in the nature of things, have little to do. Economic benefit may thus be sacrificed by a people to some other advantage, political or ethical. We shall, therefore, leave aside, for the moment, these other motives and consider if protection would not be justifiable as an activity which is prompted by the desire to secure economic gain and may, therefore, fall within the domain of economic theory. When we pursue this line of thought, we, of course, assume that the unit to be dealt with, is not the isolated individual or a number of Robinson Crusos promiscuously thrown together, but an organic body, a nation. We also assume that the capital and labour, that is to say, the productive power of a community is not something that is ever fixed by nature, which is incapable of modification. Now, both the assumptions are not like the metaphysical conceptions of the older economists, mere abstractions, but they are living realities. It follows from this that in the domain of international exchange, the superior advantage a country has in bargaining with others, may be developed by conscious effort at enabling the national industries to control a growing portion of the total supply of certain commodities in the world market and to provide the supply at a diminishing cost, as on this capacity depends

---

[10] Leubuscher: "Liberalismus and Protectionismus in der englischen Wirtschaftspolitik seit dem Kriege."

[11] Weigman.

CSL

the benefit which exchange between countries is calculated to confer on them. But so long as the home market is dominated by the supply of commodities coming from outside and offered at low prices because they have been produced at lower costs, the indigenous manufacturer can not compete and can not organize national capital and labour in association with the country's natural advantages so as to be able to offer his goods at the world price. The foreign supply has, therefore, to be restricted and its price has to be raised to a higher level. And who will do this ? It is here that the state comes in and by means of protective duties minimises or prevents outside competition so as to permit national resources being freely developed. If this duty is not undertaken by the state, combinations, cartels and trusts arise and they control production, dominate markets and fix prices without reference to the interests of consumers, and the ultimate economic good of particular nations. National governments then find it necessary to take action on behalf of their communities and to regulate the supply and the prices. Free imports of commodities rendered cheap by efficient production or by adventitious circumstances, prevent the development of the resources of a country in raw materials, capital and man power and do not provide scope for the division of labour and competition to produce their beneficial effects. This is a loss to the country and indirectly to the whole world. Protection is, therefore, a temporary sacrifice, a price that the consumers of a country pay, an insurance premium for securing national economic development. A nation which adopts the policy of protection, is in the position of a businessman who is inspired by purely economic motives and yet is prepared at times to sell without making a profit or even at a loss if he expects thereby to secure a better market in the near future. He may also adopt such a policy with a view to render his rivals *hors de combat* and then to capture their whole trade. The transaction is beneficial in the long run because the temporary loss is made good by the eventual profit. It is such business-considerations and far-sighted economic motives that justify the imposition of protective duties, and the economist, has therefore, to examine each problem

CSL

relating to protection from this point of view of the balance of advantage over disadvantage that will accrue to a nation if certain measures are taken or are proposed to be taken by the state for the promotion of the economic prosperity of a nation. The discriminating protection which has been adopted as its policy by government in this country, has its roots and its support in the line of argument we have followed above. Economists will have failed in the discharge of one of their important duties if they refused to consider the problems of protection on the plea that they lie out of the purview of their theory. There is no question here, as will have been observed, of falsifying the pure theory of international trade; we only verify and exemplify it. Even if protection is wrong, its assumed injurious effects have to be demonstrated and it will not be enough to point one's finger to economic theory based on assumptions which may not be true to the facts of each case.

III

LINES OF PROTECTIONIST POLICY.

If the old idea of a 'natural division of labour' between countries, interference with which must result in economic loss, is once dropped and the reasoned conviction gains strength that this division of labour my be modified by a conscious effort so that it can yield a greater net advantage to a community and that the temporary detriment due to the dislocation, is likely to be more than counterbalanced by the permanent increase of productive power which will be brought about by the new policy of the state, the ground is clear for a discussion of the problem of the adoption of measures intended to promote the development of indigenous industries with the help of a protective tariff. Wealth-production is, of course, conditioned by the state of natural resources and a country's capacity to exploit them. The climate, the soil and the mineral resources are factors that do not admit of any appreciable change, but the power of manipulating them is capable of improvement. Where the raw material is not available or available in sufficient quantities and at sufficiently cheap cost, no effort to build up an industry on it has a chance of success unless there are present other factors which more than offset this disadvantage. The aim to become absolutely self-sufficient in every respect and yet to maintain a high standard of living will, in such conditions, be uneconomic. A policy of protection, therefore, has a reasonable measure of hope of obtaining success in rearing industries, in the face of foreign competition, only in the cases of enterprises in which conditions for production and for the disposal of goods are favourable. These are the obvious limits to the possibilities of industrial progress under the protection of the tariff.

The possibility and desirability of accomplishing the industrial development of India with the assistance of the state through a

CSL

protective tariff and bounties, had been perceived for several years. The poverty of the population and the dependence of the large mass of the people on the sole industry of agriculture, had constantly attracted attention, and the example of the United States of America, Germany and other countries in the west and particularly of Japan, an Asiatic nation, all of which had built up their national prosperity by deliberate state effort, was a source of perpetual inspiration and hope to the educated classes in India. Government was being unceasingly urged to take to heart the lessons of the industrial history of other countries and bring about the economic development of India on the lines of the policy pursued by them. India was circumstanced as they had been at one time, and perhaps more favourably in certain respects, and there was no reason why this country should not succeed just as they had done. England was not a suitable model for India to copy, and protection was the correct policy here as free trade was in that country.[12] There were two reasons why this appeal fell on deaf ears. First, it was believed that for a predominantly agricultural country like India, free and cheap imports were indispensable, and the opposite policy was calculated to do more harm than good to the people taken as a whole. Secondly, though the government in India felt the justice of the plea for protection, it had no power to effect any change without the sanction of the authorities in Great Britain. The latter were, however, confirmed free traders, and even when they were not that, they could not resist the pressure of British manufacturers whose interests were closely bound up with an open door in this country, which offered a wide and growing market for their goods. The history of the Indian tariff, into which it is not necessary to enter here, is sufficiently eloquent in this connection. The drift towards protection, so far as government was concerned, came very slowly. The Industrial Commission, which was appointed at the instance of the Indian legislature, definitely pronounced in favour of a policy of state aid to industries and it did not express any views on the question of tariff protection because it was precluded from doing so by its terms of reference. The Montagu-Chelmsford reforms ushered in an important change. The conditions of war, in the conduct of which India took a prominent part by keeping the eastern theatres supplied with materials of all kinds, gave a temporary stimulus to many indigenous industries, prices and profits being high, and new capital entered into economic enterprise on a surprisingly large scale. Exigencies of the government treasury, besides, necessitated the imposition of high import duties which tended to give unintended protection to some of the industries. Further, one of the features of the constitutional reforms of 1919, was to relieve the Government of India from the control and the dictation of the Secretary of State in matters fiscal when it was in agreement with its legislature, and the ground was prepared for the exercise of the influence of Indian public opinion on the policy of the state. European manufacturers and traders in India were deeply interested in the question of protection and were inclined to support the popular demand as they also stood to gain by the change advocated, though they might not be prepared to go to the length to which Indians would go in advocating the adoption of a comprehensive protective tariff. The Fiscal Commission thus came to be appointed early in 1921 ; and its pronouncement on the main issue was expressed in the following words :—"We recommend in the best interests of India the adoption of a policy of protection to be applied with discrimination along the lines indicated in this report."[13] The Commission examined the existing condition of indigenous industries and the possiblities of their development from the theoretical as well as the practical point of view; and its deliberate opinion will be found summed up in the following passage :—"We have no hesitation in holding that such a development would be very much to the advantage of the country as a whole, creating new sources of wealth, encouraging the accumulation of capital, enlarging the public revenues, providing more profitable employment for labour, reducing the excessive dependence

---

[12] Ranade : "Essays in Indian Economics."

---

[13] Report, Para 55.

CSL

of the country on the unstable profits of agriculture and finally stimulating the national life and developing the national character."[14]

This deliberate conclusion of the Fiscal Commission fully vindicated the position we have taken up regarding the theory of international trade and its bearing upon the right tariff policy for India. The opinion of Prof. Pigou, which the Commission has quoted with approval, amply confirms the correctness of the line of argument we have developed in these lectures. Says Prof. Pigou :—"From these considerations it follows that the case for protection with a view to building up productive power is strong in any agricultural country which seems to possess natural advantages for manufacturing. In such a country the immediate loss arising from the check to the exchange of native produce for foreign manufactures may well be outweighed by the gain from the greater rapidity with which the home manufacturing power is developed. The crutches to teach the new manufactures to walk as Colbert called protective duties, may teach them this so much earlier than they would have learnt it, if left to themselves, that the cost of the crutches is more than repaid." The heavy import duties which had been imposed during the troublous time of the war and the years immediately after its close, were, in any event, going to continue since there was little possibility of the government's financial position improving so materially as to make a substantial reduction, a question of practical politics for a pretty long time. The burden on the public would inevitably be there, and the pressure of the protective duties would not be felt as it would otherwise have been. The vital feature of the policy of protection is that the burden that it imposes on the whole community in favour of any industry, and, therefore, of the persons associated with it who directly benefit by it, is a sacrifice and a price society pays in view of expected general benefit and is not a free present made to those people. Social assistance to individual industries, consequently, throws a responsibility upon those who reap a direct and immediate profit from it, so that the community is entitled to receive back full value for the loss it sustains for a time. In the absence of a consciousness of such responsibility, protection would lose all its economic and moral justification. Industries which are essential for national defence, stand on a different footing altogether and have to be maintained at any cost. The sacrifice entailed in keeping them up, must be regarded as normal government expenditure. In its general application, however, protection must satisfy the fundamental economic test and must yield a surplus of value over cost. The evils which are associated with protection have to be guarded against in advance and a scrupulous watch has to be kept over them. It was with this idea in mind that the Fiscal Commission insisted upon all claims to protection being referred for examination and opinion to an impartial board of experts who would not allow any thing to go in unless they felt convinced that it was a sound proposition.

---

[14] **Report, Para 54.**

The very first condition that the Commisson laid down as a fundamental requisite for the admission of the claim of an industry to public help, is that the industry concerned should possess some natural advantages such as the abundant supply of raw material, cheap power, a sufficient supply of labour, or a large home market. Now, let us try to understand clearly the significance of this condition. Protection is intended to give an industry breathing time so that it may improve its equipment and bring down its costs to the level of those of its competitors. The success of these is indeed due, to a great extent, to their general efficiency, but on the principle of the division of labour and localization, their position of superiorty is explained by some special advantage or advantages. Modern industries are run on very small margins, the cost of transport has steadily declined, machinery of the improved type is no longer the monopoly of any country, scientific discoveries and inventions and processes are not locally restricted, with the result that an industry must possess some distinct advantage to enable it to stand outside competition. Production costs consist of a variety of elements, some of which are decisive in making or marring an industry. The items of cost in which an industry enjoys superiority, must bear an appreciable proportion to the aggregate cost so that the advantage may be effective. The Lancashire cotton industry provides an instructive illustration in this connection. It could control the markets of the world in spite of the fact that the whole of its raw material viz, raw cotton, came from the U. S. A. and Egypt. This would then appear to be a notable exception to the general principle which has been referred to above. That is not so. Raw material is indeed an important item in the cost of production here as in other industries, but this disadvantage was offset by superiority in other elements of cost. The high grades of cloth turned out, the excellent and efficient machinery employed, the very climate of Lancashire, the long established traditions and connections of the industry and the large volume of the business done, all combined to enable the manufacturers to control a third of the world's spindles and a fourth of the looms of the whole world. In post-war years, however, other countries, both in the west and the east, set up, expanded and improved their own factories, thus powerful competition arose and Lancashire found the markets slipping from her, and the industry has been in a parlous state for some time. Various causes are reaponsible for this result, but one of the points to be noticed here is that the superiority of British manufacturers has lain in, among other things, special kinds of high grade varieties of goods supplied by them to the markets of the world. A natural advantage places an industry in a peculiarly favourable position as such advantage is not easy to borrow, copy or import. It is usually this fact that gives rise to imitation and adulteration, and the law of substitution comes to operate. India has a monopoly in jute and the effect of that is seen in the almost unassailable position in which the jute manufacturing industry in India finds itself. Substitutes for jute are threatened now and again, and of course, if a rival raw material is found in sufficiently large quantities and at cheap cost, it will prove a serious competitor.

Another natural advantage that may be mentioned is the proximity of the supply of fuel. It is well-known that the prosperity of the iron and steel industry in the U. S. A, Great Britain and the continental countries has been built on the secure foundation of this peculiarity. The fact that the coal deposits in India are restricted to certain parts of the country, has an important bearing on the development of our industries, as we shall have occasion to demonstrate later on. Modern industries depend for their existence on the use of power, and the proximity of coal confers a great advantage on an industry compared with its rivals. Water power has, in this connection, an importance all its own. Wherever natural conditions are favourable, there is a growing tendency, all the world over, to utilize this source of power which is comparatively cheap and efficient. An extensive home market is another favourable circumstance which is also classed as 'natural' for the obvious reason that the good fortune can not be shared by the foreign competitor. It is geographical proximity and has to do with distance and the cost of transport, but the advantage is likewise associated with an assured and an adequate market which, owing to its capacity to absorb a large output, is calculated to confer on the industry concerned, the benefit of lower costs per unit. Foreign competitors are less closely in touch with the varied and special requirements of this home market and have, besides, to face the handicap of a considerable cost of transport. If commodities, therefore, enter the home market of another country, even over a tariff wall, they are enabled to do so because they enjoy other advantages which outweigh the drawback of distance and freight. We shall attempt, as we proceed, to show how those comparative advantages work in the lives of Indian industries and how they are related to the justification or otherwise of protection. The two other conditions laid down by the Fiscal Commission follow logically from what has been stated above relating to the purely economic aspect of protection. The sacrifice of the community due to a protective duty will be misdirected and abused if it is used for the purpose of assisting an industry which could have been developed even without outside help. The element of time is, of course, a factor that can not be ignored here; and a distinction has got to be made between a mere possibility and practicality. And further, the

CSL

industry to be assisted must be one that is expected ultimately to stand on its own legs and be able to face world competition.

There are a few more points that will come up in the course of our analysis of the position of the industries which have claimed protection from the state, successfully or not. And here the Tariff Commission has taken a view which is thoroughly in consonance with the theory and the policy of national economics we have developed in the course of our discourses, as against the attitude of abstract economics. In cases of industries of national importance which have been already referred to above, the language of the market place, of cost and profit, is not to be heard, and the principle has been unhesitatingly affirmed that "any industry which is essential for purposes of national defence, and for which the conditions in India are not unfavourable, should, if necessary, be adequately protected, irrespectively of the general conditions which we have laid down for the protection of industries." The Indian steel industry is thus recommended as one that should receive priority in examination. Special consideration is also to be shown to what are known as "basic" or key industries, viz, industries the products of which are utilized as raw materials by numerous other industries in India. Protection of basic industries raises difficulties which have been seized by the opponents of protective tariffs to demonstrate the futility and the wickedness of the whole policy. It is too well known how the products of one industry constitute the raw material of other industries; and if the prices of the former rise as a result of protective tariffs, those other industries suffer and they too can legitimately claim similar public assistance which has to be extended to them. It is, of course, possible to help the basic industries by means of bounties so that the prices of their products may not rise and the whole difficulty may be avoided. But generally speaking, the finances of governments are rarely in a position to meet the calls thus made on them and tariff protection is the only method of public help that is available. Compensating or offsetting duties are thus levied for the benefit of the industries injuriously affected by the import duties imposed for the protection of the basic industries. "When you once start on the slippery path of protection, there is no knowing where you will be landed," says the free trader. But it is all a question of a balance of good and evil, of utility and cost, and it is interesting to note that the Fiscal Commission is emphatic on the point as it says :—"Our general view is that the decision whether protection should be given to basic industries should rest rather on considerations of national economics than on the economics of the particular industry. In addition to iron and steel, certain chemicals and minerals and lubricating oils might be regarded as basic industries."[15]

It is not relevant to the scheme of these lectures to deal with the problem of protection from the imperial point of view and to disucss the economic bearings of imperial preference on the industrial development of India. The question did indeed arise in an indirect manner, in the legislature, in relation to the protection of the steel industry, but it is not of sufficient theoretical and practical importance to deserve treatment here. It is true that the Fiscal Commission has dealt with the problem of imperial preference with reference to India's interest in the acceptance of the policy and advanced both economic and political arguments in support of the appeal that, with sufficient safeguards, India should come up in a line with the other parts of the Empire, and of her own accord, should make a gesture of imperial friendliness to Great Britain. Free traders in England, still cling to their old faith, tempered with the willingness to promote the spirit of friendship and co-operation with the Dominions and to develop the resources of the Empire but set their faces against every thing which tends to restrict economic freedom and competition. The Conservatives, on the other hand, would throw all economic theories to the winds and subordintate every consideration to the consolidation of the Empire into one economic unit. A leading business man (Sir Alfred Mond:

---

[15] Report, Para 108.

Industry and Politics) is prepared to go to any lengths and says:—"After all, fiscal systems and economic policies exist for the benefit and development of countries, countries do not exist for the benefit of economic theories.........for myself, and for a great many more, I feel sure that we are prepared to sacrifice some of our economic ideas on the altar of imperial unity". During the past few years, there has been noticeable a decided drift in England, towards a policy of protection so far as it suits the conditions and needs of that country. Whatever the future may bring, if India is called upon to give preference to British products, apart from the question of this country's place in the Empire, each case will have to be considered on its merits. What is pertinent to notice here is the way in which economic questions are being considered more and more from the national, social and political points of veiw. The situation is, frankly speaking, perplexingly complex. On the one hand, colossal and fantastic organizations of capital are growing up in varied shapes, as cartels and trusts, and labour organizations are expanding irrespectively of national boundaries, and at the same time, statesmen and politicians are speaking in terms of nations and empires. Forces of national and imperial sentiment and solidarity are still powerful, and economics is expected to unravel the tangle and show the way to correct thought and action for communities and nationalities and governments.

It will now be convenient to indicate briefly the main lines of the critical examination of the leading features of those indigenous industries that have asked for protection. The start must be made from the time, to use a legal phrase, when the cause of action arose in regard to the complaint of the industries concerned that they were being undersold in the Indian market by foreign manufacturers. The nature, the quantity and the prices of the foreign commodities sold in the country, will need attention. A commodity has numerous varieties, and only a few of them are manufactured in this country. The foreign producers can count upon a world-wide market and either specialize in certain species of the article or turn out such large quantities of several qualities that they can afford to sell at comparatively low prices. The Indian unit of production, on the other hand, is small, and the Indian market is limited, though it may demand small quantities of a large number of different sorts. As the Indian manufacturer can not market his output at competitive prices, it is evident that his cost of production is higher unless, of course, dumping can be proved. We have, therefore, to ascertain the average cost of production of the Indian industry. Here costs may vary from factory to factory, but they are all, more or less, on the high side. The cost of production must then be analysed into its principal component parts, viz. raw material, labour, stores, interest on working capital, depreciation, management expenses, middlemen's charges and all other items which are included under the head 'overhead charges'.

When it is stated that India has an advantage in certain raw materials, we have to scrutinize the nature of those materials to find out if they are suited to the production of high qualities of commodities. Then again, though the materials may be of excellent quality, they may be available at such long distances from the places of manufacture that the natural advantage may be seriously minimised by the high cost of transport. It may, therefore, be necessary that this favourable factor should be combined with some others so that, between them, the comparative cost of production may be kept low. The question of the location of factories will depend, to a considerable extent, on the situation of the sources of the raw material. This is equally true of the supplies of coal and the production of power for driving the industrial plant. Coal or water power and raw materials may not be found in the vicinity of each other, and the manufacturer must make a correct choice regarding the location of his works, making it depend on the comparative advantage of proximity to the raw material or the source of power, the market for the finished product being another factor of which due account has got to be taken. This factor of the relative distances, and therefore of relative costs, is generally ignored when people vaguely say that there is no lack of raw material, coal and demand for finished goods in India, and protection is expected to perform wonders for them. Labour is another factor of production in the case of which unlimited supply and cheapness are always claimed in this country. On the face of it, in manufactures which are new to India, skilled labour with the necessary efficiency is not likely to be available in the required quantities. It is again possible that cheep labour my not mean low cost, and the relation between wages and productivity will have to be investigated. Indian labour is, however, capable of attaining greater efficiency with a few years' experience and training. The necessity of employing foreign labour in the initial stages of the growth of an industry and the possibility of replacing it with indigenous labour after a time, are questions which will merit attention, particularly in view of the sacrifice the nation is called upon to make on behalf of a protected industry.

The whole justification of a protective tariff turns on the supposed possibility of its being able to attract sufficient capital for investment in new industrial ventures, and we must know what rate of dividend will be enough to induce people to put their money into these enterprises. Besides fixed capital, there is the working capital, and the fate of several concerns may hang on the ready accessibility of running capital and the rate of interest that has to be paid for it. Conditions in India are certainly not as favourable in this respect as they are in western countries. Then, further, industries asking for protection, must not expect to be able, with public assistance, to distribute large dividends among their shareholders. Their costs of production must include a reasonable amount for the depreciation of plant, buildings and machinery. Protection is intended to place industries on an independent footing, and industrial concerns have to make allowance annually for the progressive wear and tear of their equipment so that the capital value of the factories may be kept intact. The system of industrial management and of sales calls for careful scrutiny for the reason that inefficiency in these matters will tend to increase costs and render competition difficult. To conclude, even when it has been found that an industry deserves to be protected, the question of the measure of protection still remains, and it has to be decided what will be a reasonable amount of public assistance so that it may be neither more nor less than what is absolutely essential for the purpose which protection has in view. The decision regarding 'compensating protection' turns on the same considerations as have been discussed above.

GSL

IV.

ESSENTIAL FACTS.

It may be generally stated that to sustain its claim to protection at the hands of the state, on the basis of the principles of national economy, an industry has to show that it has been suffering from certain deficiencies which can be made good by potential advantages which may be realized only if it is relieved from the stress of foreign competition during a period of time. It will be readily admitted that, except for efforts to bring new enterprise into existence and to make experiments along those lines, enquiries into proposals in favour of protection can be undertaken exclusively in the cases of industries in *esse* and not industries merely in *posse*. An enquiry must proceed on some solid facts about what can be and has been achieved and can not properly take cognisance of bright ideas about possibilities and schemes which may have the air of plausibility. The industries which have been already started and have had practical experience of their working, can usefully put up their case for investigation, and they are expected to place all their cards on the table. Their works costs, their selling methods and the realized prices as well as their profits and losses, must all come under scrutiny. It is not easy, of course, to ascertain the costs of foreign competitors accurately, and some guess work may be necessary in that respect. The internal selling prices and the landed prices of foreign commodities are well known. The quantities of imported goods are equally well-known, and their values are available, thanks to the statistics compiled by the customs authorities and by the Commerce Department of Government. The prices which are comparable are those of similar or the same sorts of goods. The information about the volume and the value of the imported articles is of importance in finding out the mutual relation of the imports and the home supply.

It may be repeated that for the purposes of these lectures it is not necessary to go into detailed statistics and to study each of the industries concerned in all its different aspects. Our main object is to discover the working of economic laws and illustrations of economic theory in the practical conduct of industrial enterprise. A general outline, broad facts and average figures are all that is required, and these will be used with due caution so that hasty inferences and one-sided conclusions may not be possible. It is but human that manufacturers should open their mouths too wide and ask for a larger measure of public assistance than, on a scrutiny of their claim, may prove to be reasonable. The divergence between what they considered a fair selling price for themselves and the price at which rolled steel would be imported, was estimated by the Tata Iron and Steel Company at Rs. 50 per ton, and therefore, the protection asked for amounted to 33⅓%. Paper-making firms which appeared before the Tariff Board, proposed that all kinds of paper without discrimination should be subjected to a protective duty of 25%. The demand of cement factories was that the customs duty which then stood at 15% on a valuation of Rs. 60 i. e. Rs. 9 per ton, should be raised to Rs. 25 a ton. These percentages represent the calculated difference, estimated by the industries, between probable prices of imported commodities and the probable realized prices of the home manufactures. Figures regarding the volume of imports and the home output, are extremely interesting. In the case of the steel industry it was found that there was ample scope for the expansion of the market for the domestic product. Owing to the poverty of the mass of the Indian population, the limited resources of the public bodies and the general backwardness of industries, the market for steel in this country could not be compared with the extent of the demand in western countries. The Tariff Board put its estimate as follows: [16]—" The total consumption of iron and steel in India may be put in the neighbourhood of a million and a half of tons, and of steel only at about a million tons. These figures, however, include a considerable amount of machinery, hardware, motor cars etc., which are not likely to be

---

[16] The Board's First Steel Report.

CSL

produce in India for many years to come. Nevertheless, the market is already large and, with the expansion of demand which may be expected in the next ten or fifteen years provided there is an adequate extension of transport facilities, there would be room for two or three steel works each with an output comparable to that of the works at Jamshedpur." The Tariff Board's figures relating to the actuals and the estimates of production of Indian steel given in 1927 were as follows :—" The output of finished steel at Jamshedpur was about 163,000 tons in 1923-24. The output in 1926-27 will probably be about 380,000 tons. We estimate that the output in the next seven years will average 500,000 tons and that the output in 1933-34 will be 600,000 tons of finished steel." It is essential that, in order that there may be a fall in prices and that low prices may be maintained, there should be sufficient scope for the expansion of the market for the home industry and also that there should be internal competition as a result of the establishment of new works. The Tariff Board felt satisfied on this score and adhered to the view that there was room for more steel works in the country. In the absence of internal competition, there is, besides, the danger of the industry being monopolised by one firm, but on this point also estimates were satisfactory.

The cases of the paper and cement industries are very interesting. The one is a case of overestimate of internal demand, and therefore, of the scope for expansion, and in the other, the domestic output already exceeds the internal demand. The paper manufacturers had estimated that the annual consumption of paper of all kinds, including straw boards, pasteboard etc. was about 100,000 tons, that the Indian production exceeded 30,000 tons and that the kinds of paper manufactured or likely to be manufactured in India represented nearly 80,000 tons of the total consumption. Now, the question for consideration here was whether the field for exploitation open to the domestic producers represented by the excess of the total consumption over the actual output of the Indian factories, was really as wide as it was supposed to be. About 10 p. c. to 18

p. c. of the total consumption of 100,000 tons, was 'newsprint,' paper such as is ordinarily used for the printing of dailies. This kind of paper contains a large proportion of mechanical or wood pulp in its composition and comes in at extremely low prices, and it was hopeless for the domestic manufacturers to try to compete with this paper even if protection on an enormous scale had been granted. The inclusion of the mechanical pulp paper was defended on the ground that if the newsprint were exempted, it would be substituted for other paper on a large scale. The well-known economic law of substitution would thus come into operation, and consumers would protect themselves against enhanced prices by using an article that gave nearly equal satisfaction at a smaller cost. It is the common experience of businessmen that there is a universal tendency among consumers, as there is among producers, to prefer a cheaper article, and that patriotic convictions and instincts can not be relied on for an indefinite sacrifice. Swadeshi is a voluntary vow of sacrifice made by patriots: a protective tariff is a socially organized and imposed obligatory sacrifice due from all. The principle of substitution was illustrated in the steel trade also. Belgian steel, which is not up to the British standard specification, is sold cheaper, and when the prices of all steel rose as a consequence of the imposition of protective duties, that material, which appeared to derive benefit from a depreciated exchange, was substituted by Indian consumers for purposes for which ordinarily British steel would have been employed. It was freely stated at one time that continental billets were imported into England and rolled there in British steel works. As this cheaper steel flooded the Indian markets, the offtake of Jamshedpur products suffered and when the measure of protection granted to the industry came to be revised, this factor had to be taken into due consideration. One important principle which has been emphasised by the Tariff Board, deserves to be mentioned in this place. It is, that protection, to be effective, must be adequate for the purpose for which it is given, viz. enabling an industry to dispose of an increasing quantity of its output at fairly remunerative prices. If this does not happen, protection defeats its own end, and becomes a meaninglesss sacrifice on the part of the consumers. It is necessary to remind the reader in this place that the facts and the figures used in the present and the succeeding chapters, relate to the state of the industries concerned, in which their claim to protection was considered and do not take account of changes in the demand, the supply, the costs and the prices which may have occurred since then.

To return to the story of the representation of the paper-makers. The account of how a large quantity of imported paper, which the domestic manufacturers had hoped to replace with the help of a protective tariff but which consisted of old newspapers against which it was evidently impossible to compete, had escaped the notice of all concerned and how the discovery came to be made, as it were, by an accident, may be better told in the words of the Tariff Board[17] itself :—".........a suggestion was made that in place of protective duties on paper, a surcharge of Rs. 10 a ton should be levied on the importation of old newspapers and the funds used to assist the industry. The suggestion did not commend itself to us, but it served to draw our attention to the fact that old newspapers in bales and bags make up 30 p. c. of the total imports of paper into India. These newspapers come almost entirely from the United Kingdom, and are imported largely in Bombay, Sind and Burma where they are used as the cheapest kind of wrapping paper. For tariff purposes they are valued at Rs. 130 a ton (11 pies a lb.), so that the 15 p.c. duty is just short of Rs. 20 a ton. It is obvious at once that no manufactured paper can possibly compete at the price and in ascertaining the market which the Indian mills might possibly capture, the old newspapers must be excluded. Nevertheless, although the imports of newspapers have been shown separately in the monthly Trade Returns since April 1923, all the manufacturers who gave evidence had included them in the estimate of the trade which would be captured. These imports amounted to a

---

[17] **Report on Paper Industry.**

CSL

little over 22,000 tons in 1923-24 and to nearly 26,000 tons in 1924-25." Other varieties of paper which were either too cheap or too dear and could not possibly be produced at competitive prices in this country, had also to be excluded and the portion of the imported supply that could be replaced by the domestic industry, was narrowed down to only 20,000 tons instead of the 80,000 or 90,000 tons which was the original estimate of the manufacturers. Here we find an excellent illustration of the laws of division of labour and specialization and joint cost. The Indian consumer wants small quantities of a large number of different varieties of paper. The market for each variety is so small that you cannot concentrate on it and produce the variety economically. Foreign competitors have the advantage of a wider market spread over the whole world and can specialize in certain species of paper and can, therefore, produce an article of good quality at a cheap price. The average price of Indian paper must ultimately be governed by the joint cost of producing an extensive range of varieties, and as special equipment can not be provided and the division of labour is limited owing to the limited extent of the market, the cost of production is too high to permit a margin between it and the competitive selling price.

The growth of the Indian cement industry was phenomenal. "In 1914 a small quantity of cement was produced at Madras in one factory, while in 1924 there were ten factories at work with a possible output of 550,000 tons." Both consumption and home production have rapidly expanded, and by 1924, the Indian production and imports together amounted to about 388,000 tons, the ratio of the two being 2 : 1. While the aggregate productive capacity of India was about 600,000 tons, the annual consumption could not be put at a higher figure than about 400,000 tons. It could not be urged that there were the imports which could be replaced with the home-made product in as much as the Indian factories were already underselling the imported article. The ground on which protection is usually asked for is that the imported commodity is selling at low prices at which the domestic manufacturers can not hope to compete with it, and that with the help of protection there is the possibility of capturing a wider market and of lowering the selling prices. Here the position was the reverse of what is usual. Foreign cement sold in the market at much higher prices than the home product, and the share of the imported cement in the total consumption was small. There were two striking facts in the situation : the prevailing prices of the Indian cement were wholly unremunerative and did not even cover works costs, and they could not long remain at that level, with the result that estimates of future consumption had to be cautiously framed. And secondly, the low price of Indian cement was due entirely to internal competition and had no direct relation to the price of the imported article. It was found that imported cement was landed at a price of Rs. 55-60 per ton while the Indian prices had gone as low as Rs. 30 to Rs. 40 in the local markets. One important result of this was the conclusion that no amount of protection, not even the total prohibition of foreign imports, was likely to affect the internal price, and therefore, the prospects of the home industry !

The difference in price between the Indian matches and those imported from abroad, has been very large, and that the domestic industry was able to keep its head above water and even to expand its production, has been due to a revenue duty which is nearly cent. per cent. Government has recently accepted the recommendation of the Tariff Board that the duty should be continued at the present level and that it should be converted into a protective duty. One of the elements of a favourable position with regard to the manufacture of matches in this country, is the size of the internal market and therefore of the possibilities of expansion and of the reduction of costs. The capacity of the two dozen and more of the domestic factories is 18 million gross matches a year, and the imports of foreign matches have declined from 13.68 million gross in 1921-22 to 6.13 million gross in 1926-27. The large volume of home consumption and the nature of the article, which is now a necessary of life with increasing numbers of the population, is an asset of the domestic industry. As the Indian industry supplies such a large share of the total consumption, the price is governed by internal competition. Then the Indian cotton textile industry which asked for and received only in part the protection that was thought necessary, had a special case. It is not an infant industry but an old established one. Its main complaint was about 'unfair' Japanese competition. It did not want a wider market under the protection of a higher tariff; it wanted to retain its old market which was seriously threatened by the inroad of Japanese goods. The export trade in yarn in the Far Eastern markets has steadily declined to an almost vanishing point, and now the Indian textile industry was being beaten in its own home market. Inquiry into the condition of the Indian industry's claim revealed the following facts :—"Japanese yarn of 32s counts is being sold at a price which is practically equal to the cost of manufacture alone of yarn of this count in India without any allowance for profit or depreciation. In cloth of the lower counts, that is, in drills and sheetings, Indian mills are able to hold their own, and it is, therefore, doubtful whether the Japanese imports in these lines control prices in India. In cloth of counts of 30s and above, the cost of manufacture alone in Indian mills is either practically equal to or higher than the Japanese sale price and Japanese competition, therefore, exercises a depressing effect on the prices of Indian mill production."[18] One of the chief causes of the depression in the mill industry in Bombay city and island was declared to be the increasing competition of mills in Ahmedabad and other centres.

While on the subject of markets and prices, we may usefully draw attention, at this stage, to an important consideration. We are in the habit of speaking of an Indian market, an Indian price and of the Indian producer. As a matter of fact, there are numerou markets spread over the whole country, and chiefly owing to their varying distance from the factories, they become the spheres of in-

---

[18] Textile Tariff Board's Report.

CSL

fluence, to borrow a phrase from diplomacy and high politics, of different manufacturing interests. Economic productivity is the creation of utilities which come to possess varying values to local consumsers. As numerous manufacturers will try to reach the widest field of consumers, competition will set limits to the volume each producer will be able to dispose of. In a state of competition, the cost, including that of marketing, that is covering the distance between the factory and the consumer, has to be adjusted to the price at which consumers will buy. To the locality where this cost is higher than the price, the market is lost, unless the loss is made good in a more favourably situated market. We shall have occasion later to deal with this problem at greater length. The subject is referred to here to show how the Bombay mills came to suffer from depression owing to the curtailment and loss of what at one time were their special spheres. This remarkable change is brought out in the following statement of the Textile Tariff Board's report :—"...Since the end of the war, the up-country mills have increased their production of yarn by 115 million pounds and of cloth by very nearly 400 million yards. At a time, therefore, when...owing to the loss of the China trade in yarn the Bombay mills have had to find an outlet in the home market for the equivalent of an extra 300 million yards of cloth, they have been faced with the competition of an additional 400 million yards of cloth manufactured in India. The effect of this increasing competition on the part of the up-country mills will be obvious, more especially as it is direct competition since the up-country mills manufacture goods which are mostly of the same qualities as those made in Bombay."

Now let us turn to the consideration of the advantage in relation to raw materials. There was a general impression in the minds of people that the prospects for a steel industry were not very bright in this country in as much as the supply of its principal raw materials was far from adequate and it was thought to be so located that it could not be economically utilized. Fortunately, however, actual enquiries revealed that the iron ore available for the use of the works at Jamshedpur was of a superior quality and that the material was to be found in abundant quantities. What was further of importance was that the fuel needed for the industry, was also to be found near the works. The proximity of coal, ore and the other materials and also of the market for the finished products, was an essential condition that had to be here satisfied; and all doubts as ragards the quantity, quality and distance were set at rest. The so-called iron belt, extending over the district of Singbhum and the adjoining Feudatory states of Orissa, is found to contatin some of the richest ore to be had in the country. Quality and cheapness are advantages on the side of the Indian industry, and the Tariff Board put the matter expressively in the following words :—" In other parts of the world equally rich ore is to be found, but it can not be landed at the iron works at any thing like the same price. Conversely, equally cheap ore exists in some countries but of nothing like the same quality. The advantage India possesses in the shape of iron ore is therefore very great."[19] Coal of a particular quality is needed so that good coke can be made out of it at low cost, and it is found that though the quality of Indian coal is inferior to the coal available in the great steel-making countries of the west, the cost of mining is comparatively low so that the total cost of coke per ton of pig iron is far from excessive. The decisive consideration is the cost of coal that figures ultimately in the making of pig iron, and the defect in the quality of the coal is made good by the cheapness with which the material can be put down at the works so that if more has to be used, the loss is offset by the cheapness of putting it down at the works.

The establishment of an industry in a particular locality is determined by the predominance of some one or more of the natural advantages we have spoken of above. The industrial organizer has to estimate his comparative costs according to the situation of his projected factory and to decide how he will combine his advantages

---

19. **First Steel Report.**

CSL

and drawbacks so as to secure the maximum net result. If he sets up his works near the ore, the coal may be far off; and if he prefers the vicinity of the coal, the ore stands at an inconvenient distance and may entail comparatively greater cost. Further, the market may be situated at such a distance from both that the cost of transporting the finished product may prove prohibitive. The skill in industrial organization lies in weighing these factors together and in arranging them in such a manner that their adjustment may result in the lowest total cost of the manufactured article. Here again we see the operation of the law of joint cost. In this respect too India enjoys a natural advantage in as much as not only has the home industry an abundant supply of ore of excellent quality, but it has its coal at a favourable distance from the ore. There are very few instances of a more advantageous geographical location of the raw materials of the steel industry, in this regard either on the continent or in the U. S. A. The law of joint cost finds further illustration in the supply of another raw material of some, though not of equal, importance in steel manufacture, viz. fluxing material. And in the light of what has been already stated in relation to that law, the following observation of the Tariff Board about fluxing material will be found interesting:—" In respect of fluxing materials India does not possess the same superiority as in ore, but, economically is at no disadvantage. Lime stone of the best quality is to be found in India but at such distances from the iron ore and coal as to preclude its use for metallurgical purposes. There are, however, ample supplies of lime stone and dolomite within a reasonable distance of the other raw materials. These supplies though not equal in quality to those available in other countries are nevertheless sufficient for the purpose. Larger quantities have to be used, but, as the materials are cheaper, the cost of flux is not on the whole higher than it is elsewhere." The fact that India had a distinct advantage in the manufacture of steel and iron so far as favourable natural conditions were concerned, was proved by the ease with which Indian iron could be exported to Japan and the west coast of America. But in the manufacture of steel, India's natural advantages did not come into full play and the comparative cost of turning the pig iron into finished steel, was higher though the capacity of the Indian industry to manufacture steel of good quality was no longer in doubt.

The bearing of the distance of a factory from its supplies of coal and from its markets, on its cost of production, is instructively illustrated by the position of the Indian cement industry, which has no natural advantage in respect of fuel. Almost all the cement factories are so situated with regard to coal that the freight on fuel is a serious matter for many of the works. Coal is required in this industry for two purposes : for the raising of power and for fuel in the kilns. The Indian cement factories are scattered over a fairly wide area of the country, and are very differently circumstanced as to the supplies of coal and to their markets. They are to be found in Kathiawad, in the Central Provinces, in the Punjab, in Gwalior and in Hyderabad State. The coal required for the kilns has to be of a superior quality and has, therefore, to be conveyed from the coal fields of Bengal and Behar, while C. P. coal, which is of an inferior quality, may be used for the raising of steam. From this aspect of the location of the factories it will be realized that the cost of coal at the works is bound to exercise a predominant influence on the prospects of the industry, and a protective tariff is not calculated to render much help in its development and prosperity when it suffers from such a natural disadvantage. If we take five representative factories, including one at Porbundar on the Kathiawad coast and the Katni grounp in the Central Provinces, it will be found that while the cost of coal at the colliery per ton of cement varies between Rs. 3-9 and Rs. 5-5, the freight from colliery to the works per ton of cement varies from Rs. 2-9 for the Central Provinces Portland Cement Company to Rs. 10-1 in the case of the Indian Cement Company in Kathiawad. The difference in the total cost of coal per ton of cement in the cases of the above two works is, therefore, Rs. 7-5 and Rs. 15, and is indeed very wide.

CSL

It is interesting to consider if, in the face of the natural disadvantage from which some of the Indian cement factories are seen to suffer, they enjoy some natural advantage which may be expected to wipe out the drawback, and thus we come to the question of the distance of factories from their markets. One fact of vital economic importance in connection with indigenous industries may be mentioned in this place. Our port towns, such as Bombay, Calcutta, Rangoon and Karachi, owing to their large populations and their higher standard of living, provide huge markets for all kinds of manufactured commodities, and a good part of the demand for the out-put of the home industries must proceed from these cities. But it is in these same port towns that the competition of imported goods is the keenest. Compared to internal railway freight, sea freight over much longer distances, is very low, and in the port markets, where there is a good demand for all manner of commodities, the home-made products have to carry the burden of heavy transport charges, and the position of the imported goods is favourable. Indian manufacturers have a comparative advantage in the up-country markets in which the imported articles are handicapped by the railway freight which they have to bear from the ports to the interior. If the Kathiawad factories are excluded, there are no Indian cement works within 300 miles of a port. So far as the internal markets are concerned, the Tariff Board describes the natural advantage of the Indian works in the following words :— " Up-country, owing to the railway freight on imported cement, the Indian manufacturers have a great natural advantage; indeed it would hardly be too much to say that they possess a naturally protected market. It may be taken to include roughly all the stations on the Great Indian Peninsula Railway and the Bengal Nagpur Railway between Bhusawal and Pamposh, all stations on the G. I. P. R. and the East Indian Railway between Bhusawal and Asansol, all stations on the Bombay, Baroda and Central India Railway, north of Baroda, all stations on the North Western Railway north and east of Khanpur, the whole of the Oudh and Rohilkhand and Bengal and North-Western systems, and part of the Jodhpur

CSL

Railway." Within the region thus described, Indian cement has, as compared with its position in the ports, an advantage which varies with the distance from the nearest port but which may amount to Rs. 10 per ton on the average. Outside this field favoured by nature, Indian cement has to face the competition of the imported article on the same terms as in the ports, or on worse terms, as in Burma. And it is worth bearing in mind that the internal market where the home-made product enjoys a position of superiority over its rival, covers only one-fourth to one-fifth of the total consumption of cement in India, so that for the large balance of three-fourth to four-fifth, the Indian cement has to face the full blast of foreign competition.

Let us now try to appreciate the theoretical significance of the above facts. The Indian market for cement is divided into two clear-cut sections marked out from each other by varying prices governed by the cost of transport from the factories to the market in one case and from the ports to the market in the other. In conditions of keen competition the price would be governed by the law of minimum cost. Let it be supposed that the price at a certain place up-country, is Rs. 45 per ton which includes the ordinary cost and the railway freight from the factory to the market. This will be the joint supply price and that firm or those firms will be in a position to sell, which will be on the margin or within it. If the ordinary cost of production is assumed to be the same for all competitors, then the railway freight will be the decisive factor in determining which factory will be able to sell. If the ordinary cost, that is cost not including freight, varies with the factories, a firm which has a comparatively greater distance to cover and therefore to pay higher freight, may yet be able to capture the market provided its ordinary cost is lower than that of its competitors and allows a margin even after higher freight is paid; and the intra-marginal producers will thus be able to reap an advantage varying with the differnece between the marginal price and their own costs inclusive of freight. Imported cement which is landed at a price of

Rs. 50 a ton has absolutely no chance in this up-country market. The supply price for the imported commodity and that for the home manufacture will tend to meet as we advance towards the ports; and at a point nearer the latter, the two will meet, and the Indian cement will be eliminated altogether in the ports just as the imported cement was in the interior market. What an important role railway freight plays in the fixing of the market price, may be seen from the fact that while the cost of production at the works, exclusive of manufacturer's profit, is about Rs. 35-40, the freight to the ports is about Rs. 14 on the average. It will, therefore, be very easily seen why, in one set of its recommendations the Tariff Board proposed that a bounty of Rs. 8 per ton be paid on all cement consigned from an Indian factory through or via Calcutta, Bombay, Madras or Karachi or to any Railway station not more than 75 miles from these ports and that a bounty of Rs. 4 a ton should be paid on all cement consigned from an Indian factory to any Railway station more than 75 but not more than 150 miles from any of these ports.

It has been hinted above that low sea freight is calculated to confer on the foreign manufacturers an enormous natural advantage as the transport charges for British cement from London to an Indian port are lower than what the Indian factories have to pay for moving their output by railway to their home markets. Burma imports a considerable quantity of cement from abroad, but that market is practically closed to the Indian factories. The difference between the freight to Calcutta and the freight to Rangoon from the up-country cement factories is Rs. 14 a ton, and the price of imported cement in Rangoon is only about Rs. 3 a ton higher than it is in Calcutta and Bombay. An additional bounty of Rs. 11 would, therefore, be necessary to enable the Indian factories to compete with foreign cement in the Burma market. Burma is a valuable market to the Indian factories, but there is a wide gulf fixed between their supply price and that of the foreign manufacturers, to the serious disadvantage of the former.

GSL

There is another interesting point about Indian cement. It has been repeatedly examined by Government experts and has been pronounced as perfectly equal in quality to the imported portland cement. In spite of the expert testimony and the evidence of consumers as to its satisfactory character, however, there is a lurking prejudice in the minds of the users of Indian cement against an article the manufacture of which has been only recently started in the country, and a preference is shown for the imported article. The extent of this preference for imported cement may be put down at Rs. 8 per ton. This fact illustrates the importance of demand in the determination of value and the limitations of the cost of production theory of value. The superior advantage of a trade mark is essentially of the same character and may depend upon nothing that is intrinisically good or sound. Things become valuable because the people who want them imagine that they are so, the limit being their willingness to bear the cost or the sacrifice necessary to secure them. Here we have a convincing demonstration of the necessity of retaining in Economics what is called the 'subjective' theory of value, which some economists would altogether eliminate from the science as superfluous.[20]

---

[20] Cassel: "Theoretische Sozialokonomie."

CSL 63

V

ANALYSIS OF COST.

The older economists, who believed in the existence of 'natural laws' in Economics, were inclined to think that there was a 'natural division of labour,' between countries of the temperate and the tropical zones. The former were better fitted, by their cold climate, superior training and efficient organization, to carry on manufacturing industries, whereas the tropical lands were in an advantageous position to grow food crops and raw materials of industry, which required a particular soil and climate but which did not need much skill, capital and organization. Unhampered trade between these zones was, therefore, in the best interests of all. A protectionist policy, however, seeks to minimise the disadvantages and promote the advantages of the two exchanging groups so as to make the division of labour and competition more effective and therefore beneficial to the peoples of the world. What is to be noted here is the fact that the older economists recognized the existence of natural advantages and disadvantages which were the basis of the international division of labour and which were related, properly speaking, to the difference in the absolute cost of production. It should not be forgotten that the natural barriers which separate industrial zones and nations from one another, are steadily losing their rigid character with the advance of science, the rapid improvement in the means of transport and the growing use of substitutes as the constituent materials of commodities. The wonderful growth of the artificial silk industry during the past few years and the similar development of dye manufacture, are illustrations in point. Products which today depend very largely, for their manufacture, on natural e. g. vegetable raw material, may, in an increasing measure, be produced in the laboratory. An industry may likewise be established at a great distance from the sources of its chief raw material e. g. Lan-

CSL

cashire cotton mills. We have a rise and fall of industries in the economic sphere corresponding to the rise and fall of kingdoms and empires in the political sphere. Accessibility of suitable raw material will, however, continue to play an important role in the localised organization of industries; and it will now be worth-while to pursue our investigation of the industries we have selected for study, with particular reference to the importance of raw materials in their costs of production.

Take first the manufacture of paper. Rags have been the recognized raw material of this industry from olden times and in all countries. Strong paper is even to-day made of rags and it is very costly. Owing to the limited extent of the Indian market for this variety of paper, it is not manufactured in any appreciable quantities by Indian mills, though rags are mixed up with other materials for the making of various kinds of paper. It may be mentioned in passing that the common impression that rags are a cheap material for the making of paper in India, is not correct for the reason that this stuff, as it finds its way to the factories, is in such a dirty state, that the cost of cleaning and bleaching the material tends to be prohibitive, and the effect on the quality of the paper turned out, besides, is very unfavourable. Grasses and wood have now come to be the standard raw materials for paper manufacture, and special attention has to be paid to these as rags are not a natural product and India can not be said to possess any natural advantage in that regard. 'Esparto' grass is in common use in western factories, but wood fibre is being still more extensively employed and is to-day the cheapest material for the industry. Scandinavia, the Baltic states, Canada and the U. S. A. have abundant supplies of the trees which are especially suitable for this purpose. The demand of newspapers for this cheap variety of paper, has grown so enormously during the past few years that the forests in the above countries are threatened with denudation, and the governments there have been seriously considering the problem of conserving and renewing their forest resources. Grass has an important natural advantage over wood

CSL

in as much as it is annually renewed while wood takes generations to grow up again. This question of the relative merits of grass and wood, has a special significance in India at the present moment for the reason that it has been recently discovered that bamboo is quite a suitable material for paper-making and that India can command extensive supplies of this natural product. Not only this. The paper made out of Bamboo is found to be superior to the paper made from the Indian grasses. The economic consideration will here, of course, weigh very heavily as to the cost of the transport of the bamboo from the forests to the sites of the mills and the relative advantages of taking the raw material to the mills and taking the mills to the raw material. As in the cotton textile industry, some mills may specialize in spinning and others in weaving and still others may carry on both spinning and weaving, in paper manufacture, the making of pulp may constitute a separate industry or it may be combined with the manufacture of paper, each factory making its own pulp. There appear to be good prospects for the manufacture of bamboo pulp, and the possibilities of the economic exploitation of that natural raw material will have to be carefully considered.

The grass that is used for making paper in India is predominantly the " Sabai." The species of paper made from this material satisfies the requirements of a certain class of consumers in India owing to its peculiar qualities, but its utility is limited and consequently the market for it is restricted. Sabai makes a strong paper that may be used both for writing and printing, but it is very poor in smoothness and finish and is, therefore, replaced by imported paper where the latter qualities are required. Now, when it is said that there are abundant supplies of this grass available in India and that, therefore, this country has a natural advantage in that respect, we have to consider what this means. Physical abundance of grass is not the same thing as an economically abundant supply. It is superfluous to repeat that these are two different things. It is not abundance in the general that is of importance: it is abundance in a given place and in relation to other factors that counts. If the mills have to go farther afield for the collection of the grass with each increase in the distance, the cost of transport and labour increases and the raw material tends to become uneconomical. The economic law bearing on this question is the law determining the relation between the price of a finished product and the cost of the agents of production. The price of a commodity casts its reflection back and governs the price of the productive goods. If the market price of a commodity is not high enough to cover the prices of the productive goods, then the latter will cease to be employed and the production itself may have to cease. It is the marginal utility of the supply of grass taken as a whole, which is available to a given mill, or its marginal cost, or to put the same thing in another way, it is the marginal demand price compared with the marginal supply price that is conclusive in this connection. The abundance of supply of grass is, therefore, at bottom a question of the price at which it can be secured, and that will, in its own turn, depend, other things remaining the same, upon the price of the finished product. When the competitive selling prince of paper is low, grass which is apparently cheap, is practically dear to the manufacturer who can not economise on other items of cost.

It will be instructive to note that the Bengal paper mills have to bring their grass from very long distances running into hundreds of miles. Take the case of the Titaghur Paper Mills which drew their supplies from four different areas, stretching as far as the extreme north-west of the United Provinces and into Nepal. The distance in the former case is more than 900 miles from the mills and in the latter, the distance from railhead to the mills is 580 miles. The remaining sources of supply are not less than 200 miles in any case. The cost of putting down the grass at the mills, works out, on an average, at Rs. 50–55 per ton and at Rs. 125 per ton of pulp or paper. There is obviously very severe competition, if not a scramble, among the mills to obtain their supplies of grass, and the long distances to which they have to travel, add Rs 25 in

CSL

railway freight to the cost of paper. The question may here suggest itself : if the mills have to transport their grass over such long distances and at high cost, why should they not avoid this cost by going near the raw material ? The answer to the question is to be found in the estimate of the comparative costs of production under the two sets of conditions. If the Bengal mills were transplanted to the vicinity of grass, there would indeed be a saving on the freight of 2½ tons of grass carried over a distance of 900 miles for making one ton of paper ; but freight will have to be paid, at the same time, on 5 tons of coal that will have to be carried from Bengal and Behar for ths same quantity of paper, and the distance to be covered will not be very much less. Distance from the market will be another factor, but that may be ignored for the moment. When the claim of the paper industry to protection was being considered, there was indeed in contemplation a scheme of such a mill that would be established near the raw material ; and the Punjab Paper Mills Company hoped to be able to obtain its grass from an area within a radius of 20 miles from the mill at a cost of Rs. 14 a ton at the mill. Even if this figure is raised to make allowance for a possible element of oversanguineness and the cost is taken at Rs. 20 to 25 a ton, the cost of grass per ton of paper is reduced to Rs. 50 to 60. What was pertinent in this instance was that it was proposed to use hydro-electric power at the mill so that the advantage of the proximity to raw material was not likely to be wiped out by the distance from the coals upply and, therefore, by high fuel cost. Is it any wonder, in the circumstances described above, that the Tariff Board arrived at the conclusion with respect to paper mills using Sabai grass as their principal raw material, that their claim to protection was not made out ? That verdict is to the effect that "the conditions of the Indian market being what they are, and with pulping wood at its present price, the paper mills in India, which use sabai grass, have no natural advantage in competition with imported paper, but on the contrary, are at a disadvantage".[21] The

---

[21] **Paper Report.**

CSL

natural advantage would be effective only if the mills were in the vicinity of the grass and a site is selected where hydro-electric power is available.

Under the existing conditions of paper manufacture, a factory may be said to possess a natural advantage in production if its raw material can be obtained at an extremely low cost. How natural advantages which are latent, become suddenly patent and how objects which are wealth in the physical sense, are converted into economic wealth, with all the characteristics of accessiblity and exchange value, is illustrated in an interesting manner by the emergence of the bamboo plant into sudden fame. In large tracts of this country, the bamboo grows wild in enormous quantities which go unutilized for the satisfaction of the wants of man. The discovery that the bamboo makes an excellent raw material for paper manufacture is calculated to introduce a revolution in that industry and to become a romance in industrial development. The bamboo has been found to be a superior paper-making material as compared to sabai grass, and its exploitation does not present any thing like the same difficulties. Distance of the bamboo areas from the mill and the cost of transport are indeed factors which have their importance there also, but fortunately other natural advantages are associated with the use of bamboo in India. The bamboo can be floated down the streams of rivers which flow by the side of the forests, and the cost of transport is thus reduced to a minimum. There are such conveniently situated areas in Burma, Bengal, South-west India and particularly in Cuttak, the last mentioned having, besides, advantage of proximity to a coal mine. Distance from coal is indeed a difficulty with most of these areas, but the cost of fuel would not be a serious factor if the making of pulp from bamboo were made a specialized industry, as only half the quantity of coal required for the manufacture of paper is sufficient for the manufacture of pulp. It may be possible to carry on pulp-making on a large scale and paper mills may buy their pulp from the pulp works and Indian pulp may even be exported. India can be said to possess a natural advantage in the raw materials of paper-making only on the basis of the utilization of the bamboo in conditions described above.

Before concluding the discussion of this part of our study and proceeding to consider the other elements in the costs of production, we shall refer to another illustration of comparative differences in the natural advantages of industries in the matter of raw materials, caused by some of the commodities manufactured being by-products of other industries. It is a common-place of economic theory that the price of a constituent of a joint supply or of a by-product is not regulated by the particular cost that is needed for producing it and that if a by-product can be disposed of at a higher price, or in some cases, at any price, the manufacturer is enabled to secure a larger margin of profit on the main article of manufacture or to reduce its selling price. A by-product is an essential and an inevitable element in the total supply of a commodity and will be automatically produced in any case. The cost of production that may be attributed to it, will be a part of the aggregate cost of the principal finished article, and if it can be covered by any selling price, that is a distinct gain to the manufacturer who will be content with any thing he can obtain for the by-product. Let us suppose that silver mining is profitable at a certain level of price which will, however, be kept in a depressed condition if silver is found mixed up in the raw state with other and more valuable minerals for which the mining is specially carried on. Independent mining of silver will not thus be paying so long as it has to compete with the cheap supply of the metal provided by another industry, as an unimportant element in its output.

It was claimed for the magnesium chloride industry in India that it has superior natural advantage in this that the raw materials required for it are available in large quantities in the salt areas at Kharaghoda on the coast of Kathiawad. Magnesium chloride is used in India mainly as a sizing material in the cotton textile mills of Ahmedabad and Bombay. It was calculated that at the Kharaghoda works the productive capacity could be expanded to four times the demand for the finished product as the raw material consists of the residue of salt water that remains after the sodium chloride or common salt has been removed from the pans. The magnesium chloride works asking for protection claimed the advantage of good railway service at its disposal for purposes of transport, these facilities having been created for the use of the salt industry which exists there. During the time of war, the Indian industry was in a flourishing state, as imports of magnesium chloride were cut off, prices were high and the textile mills were ready to pay any thing for the article. Before the war, Germany had practically a world monopoly in the supply of the commodity, and this is how it came about. "At Stassfurth in Saxony there are extensive and very valuable deposits of a mineral called "carnallite," which is a double chloride of potassium and magnesium with traces of bromine and iodine. Magnesium chloride apparently forms the greater portion of the carnallite and must be eliminated before the more valuable potassium salts can be recovered. It is, therefore, essentially a by-product and, since the manufacturer must in any case incur the expense of its removal, whether he can sell it or not, he can afford to dispose of it at a very low price."[22] This circumstance explains how Germany could monopolise the market of the whole world and how the requirements of the vast textile indusry of Great Britain were supplied by it. Magnesium chloride is, in India, a specially manufactured product while in Germany, it is a waste product, and this explains the difference in the world-market price of the article. The natural advantage of Germany is greater than that of India; and the indigenous industry could not justifiably claim protection on the ground of favourable conditions regarding the raw materials of manufacture. There were no overwhelming compensating advantages, besides, in favour of the Indian manufacture, which could be urged in support of protection.

---

[22] Tariff Board's Report on Magnesium Chioride.

CSL

An important element in the cost of production, besides raw material, is wages of labour, unskilled and skilled, and labour engaged in supervision. Wages bear a varying ratio to the other costs in the different industries. Most of the large industries in India to-day are industries in which machinery of the modern type is used. Manufactures of the old type, carried on on a small scale and with the help of simple tools and instruments, have little chance of success in competition with large-scale manufactures. This means not only the investment of large amounts of capital and the employment of up-to-date machines and also the adoption of improved scientific processes, but the employment of skilled labour that is calculated to handle the complicated mechanism with efficiency. For lack of experience, it is but natural that indigenous labour should not be found at first equal to the tasks imposed upon it and that therefore, its efficiency should be smaller. Efficiency of labour is its capacity to contribute to the utility created by it in association with the other factors of production. It is not the amount of the money wage, small or large, that determines its cost in the industry. If the value of the output of an industry per head of the workmen employed increases, other things remaining the same, there is an increase in labour efficiency. A similar result will follow even when the money wage has been raised but when the per capita production has gone up in a greater proportion. This is the explanation of the usual statement in economics that low wages do not necessarily mean low cost and of the phenomenon that general industrial costs are comparatively low in the U. S. A. in spite of the higher money wages that prevail in that country. Another fact to be noticed in this connection is that labour efficiency depends not only on the physical and the intellectual capacity of the worker but on the efficiency of the machinery and the organization of the industry itself. Much labour is liable to be wasted and its cost is likely to be higher if the tools and machinery which workmen are called upon to handle, are not sufficiently helpful to the workers. The question with which we are here particularly concerned is with regard to the advantage or disadvantage in comparative labour efficiency in the costs of produc-

CSL

tion of Indian industries, and the extent to which improvements in it may be expected under a regime of protection. It should be mentioned in passing that a scheme of protection is likewise calculated to increase the productive power of a nation and to give increased employment to its people in the national industries. But this consideration is not directly relevant to our present discussion.

There are two facts about Indian labour which are clear. Wages of labour in India are comparatively low and secondly, its efficiency in many departments of industry is lower than in western countries. Efficiency of labour is to be judged, as has been already stated, from the relation between its money wages and its productivity; it may be found in certain classes of labour and in certain branches of industry that if Indian productivity is low, its wages are equally low and that for the prevailing wages, the labour can not be regarded as inefficient. Let us apply the above general principles relating to wages to labour efficiency as it is to be found in the actual working of the Indian industries. Though mechanical and industrial education has not yet been provided for on any appreciable scale, there is an amount of the old type of labour which is found suitable for the new industries as such workmen learn their jobs with a moderate duration of practical experience and thus evince a remarkable degree of adaptability. Foremen and supervisers need higher qualifications and, therefore, regular training. In the case of mechanical and scientific experts, of course, this training is an absolute necessity. It is superfluous to add, however, that it is in the interest of the employers themselves that provision should be made for the training of their labour and that measures should be taken for increasing the efficiency of labour generally. The responsibility of proprietors of industries that receive state aid, is peculiar in this respect. The employment of Indians for all jobs in their works is important not only from the point of view of national economic progress but from that of economy in their own factories. Whatever the higher efficiency of the foreign hands, there is no question that as compared with indigenous employes with the same qualifications, they are more costly. The U. S. A., Japan and other countries have consistently followed the policy of bringing out expert workmen at high cost in the initial stages of industrial undertakings and have dispensed with their assistance when local men had been sufficiently trained and the industires could do without them. A similar procedure has had to be adopted in India, and in the steel, cement and paper industries, for instance, outside labour is to be found to-day in greater or smller degree. The more complicated, the more novel and the more difficult the operations of an industry, the greater is the need for foreign labour and the longer also it is retained. When workers are brought out on short term contracts they have to be paid higher salaries and allowances. With regard to unskilled labour, the supply in India is pretty large though factories have very often to draw for it upon neighbouring and even distant provinces. The efficiency of this class of labour is admittedly low, and in better conditions and with a little training, its productivity is sure to increase even though a slightly higher wage may have to be paid for it.

The remarks we have made above apply particularly to the labour conditions as they prevailed at Jamshedpur in the earlier years of the growth of the steel industry there and hold good to a good extent even at the present moment. This is what the Tariff Board said in relation to this subject in its first report on that industry :— " In respect of labour India suffers under a disadvantage inevitable in any country which is mainly agricultural, and where industrial experience and training has still to be acquired. This renders it necessary at present to import skilled supervision from Europe or America for the more difficult processes involved in manufacture of iron and steel. This is a temporary difficulty which will eventually disappear. As regards unskilled and semi-skilled labour, wages in India are relatively low, but it is doubtful whether in this matter India has any advantage. Low-paid labour is not necessarily cheap, and far more men are employed in iron and steel works in India than would be considered necessary in western countries. In this

CSL

matter also time should work an improvement." The comparative efficiency of labour employed in the Indian steel industry can be found out by comparing the labour cost per ton of finished steel in this country with the corresponding cost abroad. The extra cost at Jamshedpur due to the employment of outside hands was estimated to be Rs. 2 per ton, and this could be saved if and when they were replaced by Indian men. The process of replacement was being carried out steadily as far as the extention of the plant permitted.

It may be expected that in the paper-making industry, which has been in existence in India for half a century, European labour should have been replaced by Indian labour in the superior posts long ago. The Tariff Board, therefore, felt disappointed that except in the two up-country mills which were, however, not very important, no progress in Indianization had been made. This meant that, to say nothing of other considerations, and to put the matter on the pure basis of rupees,annas and pies, the mills had failed to take full advantages of their opportunities to economise and to reduce their costs. A futile attempt was made to argue that to be an efficient paper-maker, a man must be born to the trade or should at least have entered the industry as a boy. Now, there is nothing specially difficult about paper-making which young Indians could not have picked up in a few years. In the case of other industries in which even more difficult work has to be done, no such difficulty has been experienced. In one of the paper mills, 12 Europeans were employed, including the manager and the assistant manager, four engineers, a chemist, a foreman, two machinemen and two paper-makers. Though six additional Europeans had been employed as new machines were added to the plant in the course of 20 years, not a single European had been displaced by an Indian. The Tariff Board found no reason for thinking that "Indians can not be trained to fill in time any appointment in a paper mill", and thought that a regular scheme was necessary for the purpose of their recruitment and training. The Board felt no doubt that India was at no dis-

CSL

advantage as regards the cost of labour, but already had an advantage, though not a large one, and their explanation of this fact is the same as the one we have attempted to give, viz. that the lower wages in the Indian mills more than counterbalance the smaller effectiveness of the individual workmen. And they were quite positive in their view that "the question of Indianization is, nevertheless, of importance on the financial side, for the disadvantages of the paper industry in India are so serious that every potential advantage must be utilized to the full."

The capacity of Indian labour for adjustment and for improvement in efficiency is well illustrated by the progress which has been achieved in the manufacture of matches; and labour efficiency has indeed been declared to be one of the advantages enjoyed by the industry. It has been found that the number of employes in an Indian factory does not much exceed the standard prevailing in European countries and probably the numbers would be further reduced in the immediate future. Even in the case of the cotton mills of Bombay about the relative inefficiency of labour in which so much has been recently said, the Textile Tariff Board has found that much improvment is capable of being effected if the employers introduce certain reforms in the management and organization of the industry. The Board thus fully bears out the remarks we have made above that the efficiency of labour depends, to a considerable extent, on the manner in which it is handled, the machinery it is provided with, the conditions in which it has to work, the raw material it is called upon to use and generally the manner in which the operations of the factory are organized. One instance, among many, of deficiencies in this connection may be referred to here. The Tariff Board points out that "increased efficiency can not be expected from operatives unless they are provided with suitable raw material. The existing tendency to spin higher counts of yarn than the quality of the cotton warrants, causes breakages and increases the work of the spinner and the weaver." The provision that has been made for the training of Indians for employment in

CSL

the more technical and responsible work by the Tata Company in its Technical Institute at Jamshedpur, is suggestive of what can be usefully done in this direction. The process of Indianization in the steel industry and consequently of the reduction in costs, has been facilitated by the training imparted there and the Company's policy of admitting Indians to the higher and the responsible posts wherever practicable. The results of this policy may be summed up in one sentence in the report of the Tariff Board that "although since 1923-24 the output of finished steel has more than doubled, India is rapidly becoming less dependent on imported labour in the manufacture of steel." It may perhaps be objected here that efficiency being determined by the relation of wages to the contribution made by labour to the outturn of an industry and Indian labour being already efficient in the sense that it causes no comparative disadvantage in Indian manufactures, all efforts at raising the efficiency further by raising wages and improving the conditions of workers are superfluous. But a little reflection will show that this conclusion does not follow. If the improvements in the conditions in which workers live and do their work are likely to increase their capacity to contribute utilities, it will be an economic gain and an advantage from the larger social and the purely narrow economic point of view. The correctness of the view we have taken above, of the relation of wages and labour efficiency and the possibilities of higher productivity conditioned by a better treatment of workmen in India is borne out by the considered opinion of foreign observers.[23]

23, Schrader-Furtwangler: "Das Werktatige Indien."

CSL

VI

COST AND MEASURE OF PROTECTION.

The very first direction in which the benefit of protection is expected to accrue is larger output. Foreign imports being restricted and their prices having been raised, the home industry gets an opportunity to sell larger quantities at higher prices, and, therefore, to increase its output and to make a profit. According to the law of diminishing costs, the application of more capital and labour yields, owing to the improvements and economies that are thereby rendered practicable, comparatively higher returns. The cost per unit of the commodity produced is reduced and the end of protection is thus attained. There are certain items in the cost of production in relation to which the industry is presumed to have a special advantage, and its exploitation is expected to become more efficient, while the disadvantage relating to others may be minimised The industry may, however, have to labour under some comparatively permanent disabilities, which will render protection unsuitable or ineffective unless these are of a subordinate character. The final and total cost of production and the capacity of the industry to benefit by protection and to face foreign competition, will, therefore, depend on the balancing of these different factors. It is the common practice to divide the cost of production into three main groups of items: 1. Raw materials, 2. cost above materials, including fuel, wages and stores, (1 and 2 together being works costs), and 3. overhead charges, including interest on working capital, management and office expenses, selling charges and normal profits of the manufacturer. The items under the first and second heads have been already dealt with except for stores and chemicals etc. For most of these, India has to depend on foreign imports, and the country is, therefore, at a more or less permanent disadvantage in this respect. It is the usual principle of fiscal practice everywhere to exempt raw materials and similar other auxiliaries from import

CSL

duties, or in any case, to levy very light revenue duties on them. Chemicals and stores required for different industries are produced on a large scale in the industrially advanced countries of the world, and the local manufacturers secure the advantage of cheapness. It is not possible, in India, in view of the restricted market, to produce these articles economically, at present, and if tariff protection were to be granted to them, as essential materials for industries, their high prices would prove a handicap to the development of the more favourably situated industries which deserve to be encouraged. These basic industries are, therefore, generally given protection through bounties. To assist the cotton textile industry, government have recently removed the duties on the imports of mill machinery and stores.

Manufacturers are always in need of working capital which they have temporarily to borrow and on which they have to pay interest and that is a standing charge and an important item in the 'overhead.' As the rate of interest is generally high in India, this is a comparative disadvantage from which Indian industries have to suffer. Seven to eight per cent. must, therefore, be calculated on this account. Banking facilities play an important part here and India is backward in that respect. The output of factories is not disposed of the moment it is produced and long credits have likewise to be given to the wholesale purchasers. This means the locking up of funds and consequently the loss of interest for a period. British steel manufacturers were recently reported to be discussing a scheme for setting up an organization for the purpose of providing such credit as they found that they were losing their custom for the lack of necessary facilities. In its first report on the steel industry, the Tariff Board allowed it interest at 7½ per cent. for provision of interest on the lock up of capital in raw materials, outstandings, and stocks of production. At a later enquiry, in 1927, the rate was reduced to 7%. In the case of the paper enquiry, the Board held, on the strength of information it had received, that the estimate framed by a manufacturing concern regarding the sums it has

CSL

to borrow and the rate of interest it has to pay, "is always affected by its own financial circumstances at the time" and that these may be "wholly irrelevant to the real issue." It went on, therefore, to state:—"After considering the evidence given as to the stocks of materials and goods usually held and the period which elapses between delivery and payment, we think that the cost of eight months' output is a fair measure of the working capital required." The amounts will, it will be observed, vary from industry to industry according to the nature of the materials, the volume of output and the rapidity or the slowness of the offtake. But a suitable allowance has to be made for this item. The standing of the firms managing the factories and the condition of the available banking facilities very largely govern the determination of the rate of interest that must be allowed as reasonable.

Depreciation charges may appear to lie outside the scope of the costs of production since they are not amounts which have to be actually expended to secure the output of commodities. But this is not correct and is a self-deception. You can not both eat your cake and have it. The fixed capital in the shape of plant and tools undergoes continuous wear and tear in yielding the services it does, and therefore, steadily depreciates, which means that its capacity to produce, grows less and less. Capital is nothing but a fund of services, and as one draws on them, they get steadily exhausted, so that at the end of a certain period, nothing will be left of them and the industry must come to a stand-still. The income of an industry is really the surplus of utility over cost, the last including the cost of depreciation. If, therefore, capital is to be maintained intact as regards its service-yielding power, a fund, corresponding to the annual loss of capacity, must be set aside. Managers who are either short-sighted or are driven by the pressure of greedy share-holders, to declare a larger dividend, do not make adequate provision for this item. The rate of depreciation is governed by the expected life of machinery and buildings. In some cases, these wear out much more rapidly than in others, and the rate of depreciation consequently

CSL

varies. In order to receive a steady yield on capital, wise firms provide not only for depreciation regularly and in ample measure, but set aside reserves and other funds, which virtually become additions to capital. The report of the Cotton Textile Industry Board contains a good deal of interesting information on this subject, and it will be found from it that the Board favours the system suggested above viz. that of making full allowance for depreciation before the profit balance is struck. The Board has illustrated the irregular practice that is some times followed, by citing the instance of a Bombay mill which in 1920, when its profits were at their highest, placed only Rs. 62,000 to depreciation out of a total profit of Rs. 15·38 lakhs but found it necessary, in 1923, out of a total profit of only Rs. 1.85 lakhs to place Rs. 1.38 lakhs to depreciation. An average of 7½ p. c. is normally regarded as fair depreciation on the fixed capital of a factory.

It is superfluous to point out that an indigenous industry that aspires to compete successfully with its foreign rivals, must instal the most efficient machinery that is available, and in this matter, India suffers from a natural disability. India can not hope to manufacture its own machinery for years to come and must import it from abroad and pay heavy charges for transport, from which the foreign manufacturers escape. In the second place, mechanical inventions which are being daily made and adopted in western countries, take long to reach India. The same remark may be made with respect to improved scientific processes of which the home industrialists may not even be aware until they have become old and out-of-date in competing countries, to be replaced by others which are still more efficient. Thirdly, the large amounts of capital which the instalation of new machinery and its replacement by newer mechanical devices and appliances require, are not easily accessible in this country. Lastly, those men of enterprise and organizing ability who have been elsewhere the makers of great industries, are, in the backward state of Indian industries, only rarely to be met with. Some of these disadvantages will, of course, be temporary, and as the counrty advances in industrial development, will tend to disappear. Progressive firms in the west will build up reserves and will find it economical, with their help, to scrap machinery only a few years old and instal new and improved types which are more efficient. In judging the possibility of an industry benefiting by protection, attention has to be paid to the efficiency of its machinery as well as that of its management.

To complete our analysis of the cost of prodution, it is necessary to consider what should be the reasonable allowance for remuneration for management and office expenses and a reasonable return on the capital invested. There is no uniform system of management or of fixing the above remuneration, and the amount of office expenses must be judged from the nature and the volume of the work involved in each case. The managing agency system prodominates in India, and it has its admitted defects. It is not the system as such, however, that is at fault but the manner in which it is worked. But the question of the return on capital merits special attention. It is argued that since capital is shy and scarce in India, a larger yield has to be promised and assured to share-holders if they are to be induced to put their money into industries and this is specially true of new ventures. The return on capital, in such cases, is remuneration on account of interest and for the risk of loss involved. The supply price of capital is higher in India, and the return on capital expected is consequently higher. The capitalization per unit of a commodity is, on an average, in this country higher than in the west for two reasons: (1) the cost of importing and setting up machinery may exceed the corresponding cost elsewhere by more than a third, and (2) the return on the investment has to be such as to attract shy and unenterprising capital. Conditions in respect of the supply of capital have radically altered since the time of the war, and were, for a few years, highly in favour of the development of indigenous industries, as may be seen from the huge floatations of the boom period that succeeded the close of the war. There are, however, cycles of industrial prosperity and depression, and capitalization has to be maintained in strict relation to produc-

CSL

tive capacity. This is not often done and the result is that machinery, plant and buildings may stand in the books of industrial concerns at fictitiously higher values than are warranted by the dividend-yielding capacity. This is specially the case in concerns where adequate depreciation has not been provided for or values have been inflated by speculation. In many a British Industry, it was found that when the boom was over, the nominal capitalization offered a basis on which no profit could be earned and no dividends could be distributed, and the remedy of drastic writing down of capital had to be applied. The true value of an industrial plant is not, therefore, what it cost originally but its replacement cost at any given time. In determining what should be regarded as a fair return on capital to be allowed in the costs of an industry to be protected, this consideration has to be given proper weight. The Tariff Board found it necessary to do this in arriving at proper capitalization with regard to steel and other industries. The Textile Tariff Board has given very interesting statistics to illustrate the double evil of overinvestment in the Bombay cotton industry in the boom period, viz. capitalization at inflated values and extensions at the high prices which prevail in such a period. When prices are high and profits are high, people are in a hurry to buy and sell mills and factories at inflated prices and to expand productive capacity also at heavy cost. When the inevitable reaction comes, the nominal values of industrial concerns are found to be hopelessly out of accord with current and replacement values, with the result that the depression is deepened and there are huge losses which could have been avoided to a considerable extent if adequate reserves and depreciation funds had been built up. The temptation to use up profits to pay high dividends, to the neglect of due provision for depreciation and reserves and thus to make hay while the sun shines, brings its own nemesis. We give below a few statistics in this connection quoted by the Textile Tariff Board and its comments thereon :—" An examination of the balance sheets of the Bombay mills shows that for 1920, 35 companies comprising 42 mills declared dividends of 40 p. c. and over, of

CSL

which 10 companies comprising 14 mills paid 100 p. c. and over and 2 mills paid over 200 p. c. In 1921, the number was 41 companies comprising 47 mills out of which 9 companies comprising 11 mills paid dividends of 100 p. c. and over. In 1922, it fell to 29 companies comprising 34 mills of which 4 paid dividends of 100 p. c. and over and in 1923, only 7 mills paid dividends of 40 p. c. and over. Whatever criterion be adopted, it must, in our view, be held that the dividends paid during the boom years were unduly high. This criticism holds even more of 1918 than of subsequent years, for in that year no less than Rs. 192 lakhs out of the net profit of Rs. 228 lakhs were distributed in dividends. It was argued that the reason for this was the favourable outlook in 1919, but if the proportion of dividends to profits in 1918 had been kept down to reasonable limits, there can be little doubt that this would have done much to check the speculation of the following years so far as it affected the mill industry. In other words, a cautious financial policy in 1918 would have subsequently proved of immense service to the industry. The best test is that of results and, judging by these it is obvious that if the Bombay mills had husbanded their resources to a greater extent in the boom years and still more in the years which preceded them, they would have been in a better positiion to meet the subsequent depression."

When it has been decided, after due consideration of all the relevant facts relating to an industry that it deserves protection on economic grounds and the amount of the protection that is reasonably needed to make it effective and the method of extending it also have been settled, the question of the onerous influence of the measures proposed on the consumers and other interests has to be carefully examined. Protection indeed means sacrifice to consumers of the article protected, and the injury done by it to other industries may be so serious that the resulting good to the community may, after all, prove to be problematical, and there may be more detriment than benefit to the nation as a whole. If the interests adversely affected are, from the national point of view, of subordinate importance, the general advantage that is expected to accrue from the policy of protection may be held to be sufficient compensation for the temporary loss involved. But if the direct effect of protection is serious injury to important industries whose prosperity is also a national asset and which are being carried on as private enterprises receivng no state assistance, it must be an essential part of the policy of protection that those industries should be compensated for the loss inflcted on them. In determining what the amount of this compensating protection should be, careful calculation has to be made of the amount by which the cost of the industries concerned has been raised as a result of the higher import duties.

This problem presented itself when the claim of the Indian steel industry to fiscal help was discussed. Steel is a raw material for important industries, prominent among which is what is known as the Engineering industry. At the Jamshedpur works not only was iron ore made into steel but the steel was rolled into suitable shapes such as rails and plates. But the further manipulation of the steel thus rolled by various operations such as bending, drilling and rivetting etc. is done in separate works which prepare the steel for purposeses of bridge-making, house-building etc. and for the construction of tanks, chimneys, river steamers and so on. This is a specialized industry which had to face the competition of imported goods of the kinds it dealt in, and apart from the fact that the high price of steel was calculated to tell on the consumption of its goods generally, the grievance of the engineering industry lay in the lower price at which imported materials would be sold in the Indian market in competition with them. It would be, therefore, necessary to compensate it with a bounty equal to the additional burden thrown on it or to raise the import duty on the competing articles and thus place the industry once more on the same footing as before. It should be borne in mind here that the supply of a commodity like steel, except for a portion of it,

CSL

does not go into consumption directly as it issues from the factory but requires further manipulation before it becomes fit for various uses. The demand for raw steel is, therefore, " derived " demand, depending upon the offtake of manufactures made of raw steel. If protection proposed for the steel-making industry is to prove effective, there must grow up a wide market for its products, and the dimensions of this market will be determined by the demand for the articles in which steel is the principal raw material. This means that the fates of these industries are intertwined and both must rise and fall together.

The protection of the Indian steel industry thus necessitated the protection of the Engineering and the wagon building industries. The Tariff Board pointed out that " the manufacture of raw steel and its fabrication were inseparably connected and must stand or fall together and that the market for the sale of the steel made at Jamshedpur depended on the existence of the engineering industry." The Board went on to state :—" The engineering works have been doing valuable work for the country for many years, but so long as they had to import their steel from abroad, they could not take root deeply and had no special claim to assistance or encouragement from the state. But the position is entirely altered if once it is decided that the manufacture of steel in India should be fostered. Fabrication is one of the processes to which the Indian raw materials must be subjected before they can be used, and it is, therefore, an essential part of the manufacture of steel. The encouragement of engineering work in India provides an indirect, but immediate, stimulus to the production of raw steel, and since economical production depends on a high output, tends eventually to lower the cost of production." An enhanced import duty on fabricated steel, except for certain species of the commodity, was, therefore, recommended. Bounties were recommended on the manufacture of wagons in India on the same ground, viz. that" the building of wagons is a natural development of the growth of the steel industry in India and that it is of great importance to the

CSL

Indian steel manufacturer that this outlet for his steel should be open to him." The reason why bounties were preferred to protective duties in this instance, was the desirability of doing as little as possible to raise Railway costs and the unsuitability of a protective duty as a method of developing the industry, at any rate, at the moment. Protective duties likewise were recommended by the Tariff Board for the benefit of the tin plate, wire and nail and agricultural implements industries mainly on the ground that they provided the necessary outlet for the output of the steel industry and required compensation for the high prices of their raw materials.

We give below two extracts from the report of the Tariff Board on the steel industry, which will throw useful light on our discussion of the elements of the cost of production, a fair selling price for industries seeking protection and the measure of State assistance reasonably needed by them. Writing about the position of the wire and wire-nails industry, the Board says :—"In order to determine what is a fair selling price for the Indian manufacturer it is necessary also to ascertain what is a fair allowance for the return on capital. The capital of the Company (the Indian Steel Wire Products, Ltd) stands at a little over Rs. 21 lakhs. We do not consider it probable that capital can be raised in India, for the smaller industries such as wire, at a lower rate of interest than 10 per cent. and the total return on capital is therefore 2·16 lakhs. If this profit has to be earned on a production of 3,000 tons per annum, it amounts toRs. 72 per ton. We do not consider, however, that a firm can reasonably expect to earn a full profit during the first two or three years of its existence on an output equal to about a third of its full capacity. The total return on capital must, we think, be distributed over the full output of 9,000 tons a year and the incidence is then Rs. 24 per ton. The fair selling price is then as follows :—All-in cost of production Rs. 296 (per ton) *plus* return on capital Rs, 24 = Total 320. The evidence we have obtained from the Company, which is confirmed by other sources of information, leads us to the conclusion that imported wire, such as is manufactured by the Company, is

CSL

likely to enter India at a price without duty, of Rs. 260 a ton. It is on the difference between this figure and the fair selling price as determined in the last paragrah that our proposals are based." Speaking of the Agricultural Implements Company, Ltd., the Board remarks :—"This firm obtains from the Tata Iron and Steel Company the steel which it requires at favourable rates. The principal articles manufactured at present are picks, *powrahs* or kodalis and hoes. The Company's works, which we visited in August last, are well laid out and equipped with modern and up-to-date machinery. The full capacity of the plant is about 4,000 tons of finished goods per annum, but the present production is only about 80 tons a month or less than a thousand tons a year. At this rate of output the incidence of the overhead charges is very high and the all-in cost per ton is Rs. 767 (excluding depreciation) whereas the wholesale selling price for goods of the kind manufactured by the Company is Rs. 710 per ton. When full production is reached the all-in cost of production is expected to drop to Rs. 609 a ton excluding, or Rs. 666 including, depreciation. The profit remaining would be equivalent to a return of about 7 per cent. on the Company's share capital. We are satisfied that the Company is efficiently managed and is likely to do well provided it can reach its full output. Protection is needed in this case not as a permanent measure, but as a temporary expedient to enable the Company to get a foothold in the Indian market and increase its production rapidly."

The measure of protection needed by an industry, it will have been observed, depends upon the difference between its present and steadily declining cost of production and the selling price it is likely to realise in a competitive market. As protection by means of an increased import duty or a bounty, means a direct or an indirect burden on the public, the community has a right to know what sacrifice it is called upon to make for the sake of prospective general good. More than that, it is essential that people should know the precise relation between the burden they will be called upon to bear and the prospective benefit they, as a nation, will realize. It is, for this reason, essential that we should ascertain in each case, what the effects of a measure of protection, are likely to be. The Indian steel industry was the first on which the experiment of tariff protection was tried in this country, and the attempt very naturally evoked serious opposition on the score of the heavy cost it was calculated to impose on the community. The Tariff Board very carefully considered all the relevant arguments in this connection and determined the public sacrifice entailed by its proposals relating to the measures of protection it had proposed. As to the argument that the poor cultivator would suffer on account of dear steel, the Board observed :—" We agree with the Director of Industries, Behar and Orissa, that the direct effect of protection for steel on agriculture is negligible, and that the cultivator will be affected, if at all, mainly through any consequential increase in Railway rates that might result, to which we might add the increased cost of bridges in rural areas. It would be different if it were intended to impose a protective duty on agricultural implements generally. But only one such proposal has come before us and it is of very restricted scope." It was also argued that protection would involve a considerable reduction of imports and consequently of agricultural exports, to the serious detriment of the cultivating classes. The answer of the Tariff Board to this objection was as follows :—" Since large units are essential to cheap production, a policy of slow and imperceptible growth is out of his (the steel manufacturer) power. The industry must develop by sudden jumps or not at all. Quite apart from any question of protection, moreover, the increased Indian production of steel is imminent and the new plant at Jamshedpur is almost ready to operate. Unless the manufacture of steel in India is to cease altogether, a heavy reduction in imports is inevitable, since the only chance of cheap production is to utilize the new plant to the full." As to ths third argument that high prices of steel were calculated to affect prejudicially the prospects of all industries in the country, the Board replied that the production costs of steel were expected to fall substantially in the course of a few years and that "the industries which used steel as their raw material would be gradually built up on the basis of steadily diminishing steel costs." We can not do better than conclude this discussion of the burden of protection with the following frank statement of the Tariff Board in this behalf:—"We have no desire, however, to minimise the consequences of what we have proposed. Protection of steel involves a real burden on the community and a temporary sacrifice in order to secure advantages in the future. If we did not believe that the sacrifice was temporary and the advantages more than commensurate, we should have had no proposals to lay before the Government of India".

VII

CONCLUSION.

The Fiscal Commission had come to the unanimous conclusion that "a considerable development of Indian industries...would be very much to the advantage of the country as a whole..."and that a policy of protection should be adopted in India. But while the majority of the members recommended a policy of protection "to be applied with discrimination along the lines of the report", a minority including the President, did not approve of the qualification and supported a vigorous application of a protectionist policy without hesitation and drastic limitations. The minority fully appreciated the importance of discrimination in the application of a protectionist policy so that the burden on the consumer should be reduced to the minimum necessary for the attainment of the object in view. The difference between the majority and the minority rested on the difference of outlook and on the different views taken regarding the pace with which industrial development should be carried out and the extent of the sacrifice that the public should be called on to make for the sake of a rapid industrialization of India. The minority declared as unacceptable a half-hearted policy of their colleagues who anticipated as its result that "India for many years to come is likely to concentrate on the simpler forms of manufactured goods". A languid execution of a policy of protection, it was believed, would show only poor results and the goal to be attained would remain as far off as ever. While the majority would scrupulously balance cost and advantage at each step, though this meant slow progress, the minority believed that the achievement of substantial results needed immediate and comprehensive measures even at a heavy temporary sacrifice.

Which of these two attitudes of mind is the correct one, it is not for pure theoretical economics to say. But the aim to be attained, viz. "considerable development of Indian industries," being given,

CSL

the economist can and must determine how far the means proposed to be employed will be effective and what economic sacrifice will be entailed. The 'discrimination' to be exercised must, therefore, take account of all relevant factors, the far-reaching and the indirect as well as the immediate and direct effects of a proposed measure of protection, and these relations can not be left off as incalculable. From this it will be clear why it is stated that there is no pure economic theory either of free trade or protection: the first ignores the existence of national existence and consciousness and the second may have to deal with non-economic aims and means. The so-called theory of international trade does take cognizance of 'nations', though the supporters of free trade identify the good of nations with the good of separate individuals comprising them. The theory of international trade is not an applied theory,—an extension of internal exchange,—nor is it a theory of 'world economy.' It is not, however, correct to hold that economic theory is helpless in the face of the controversy between free traders and protectionists, and even the advocates of a special study of world economy uphold the views we have presented here. "The judgment of historical national economics on the value of the means of fiscal policy to a nation, is relative. It puts in the forefront of its enquiry geographical differences and changes in the conditions of each country. The general doctrines can only show the possibilities from which a choice has to be picked up and which display the different positions which can be justified through practical compromises. The developed theories of free trade and protection are not consequently without value. The theories lead to the formation of logical judgments which can be deduced from particular fiscal policies and in definite circumstances, and which must be similar in similar conditions One learns only by historical experience, which, however, becomes intelligible through abstract conception."[24]

The theory of international trade seeks to ascertain, first, the conditions in which exchange between nations takes place and secondly, how the resulting gain is divided between them. The old theory of absolute or comparative costs does not by itself satisfactorily explain facts of exchange, as goods may be exchanged for services the cost of which can not always be found out, and even when there is an exchange of goods, the same difficulty is encountered. The exchange in such instances turns ultimately upon the intensity of wants and the purchasing power of people. Further, the assumptions underlying the old theory that with increased output, costs remain the same and that the average costs in similar industries in a country are the same, are arbitrary and not true to reality. The influence of money incomes of exchanging countries is not, again, taken into consideration, and the influence of the elasticity of demand and supply is not sufficiently recognized. The tribute levied by one nation on another and the abuse of imperial power, prevent the growth of efficiency and purchasing power in economically backward communities. Thus there arises the exploitation of one people by another when a monopoly of supply is established in certain countries and others have a low standard of living and have comparatively low purchasing power. Manufacturing countries derive greater advantage from international trade than agricultural nations, and the prosperity of Europe and the U. S. A. has long rested on this kind of comparative superiority.[25] European nations realized this fact only too clearly after the war, with reference to the U. S. A.

---

[24] Sartorius von Waltershausen: "Die Weltwirtschaft,"

Prof. Taussig has recently examined this whole question of international trade from the practical as well as the purely theoretical point of view. His admirable book[26] throws valuable light upon the problems with which we have concerned ourselves so far. He firmly believes in the theory of comparative costs or advantages, and asserts from his wide experience of the working of protective duties in the United States, as follows :—" The evidence furnished by the development of American industries under the

---

25. " Grundriss der sozialokonomik," VIII,

26. " International Trade,"

GSL

influence of tariff legislation is most striking in the contrast between the extraordinary growth of some protected industries and the marked failure of others to show a growth at all corresponding. We have here a set of phenomena which, commonly discussed quite without regard to the general principles of international trade, are in fact clearly related to those principles—confirm them in the main, suggest modifications or qualifications in some directions, serve on the whole to illuminate and clarify the theoretical analysis. And it is no less true that most of the arguments commonly heard in the popular controversy, and particularly those on the supposed effect of protection in raising wages or keeping them high, can be understood and weighed only in the light of the doctrine of comparative advantage." The advantages and limitations of a policy of free trade or protection can be and ought to be thus examined from the economic point of view if the action taken or proposed to be taken in this behalf, is to prove beneficial. Some times it is difficult to use the purely economic measure in estimating the advantages claimed for a certain policy. The absence of definite data is, therefore, urged as an argument against the application of economic theory to facts relating to a policy of protection. The economic cost or benefit can, however, always be ascertained, for short and long periods, with sufficient accuracy. And every nation must apply this test whenever it wants to adopt measures for the well-being of the community so that it can realize what price it has to pay for its policy and whether the thing is worthwhile on the whole. The present position and the prospects of industries in India call for such examination; and our discussion in the preceding pages was intended to show the way in this direction. Even the Indian Tariff Board, which was not called upon to discuss the larger and general question of a policy of protection for India and whose inquiries were severely restricted to problems of fact set before it, found it necessary to draw attention to certain considerations of national importance in relation to the comparative cost and benefits of protection. It speaks of the advantages of a well-established steel industry in India as those arising " naturally from the firm establishment of a great industry which is essential to national security and for which India possesses great natural resources." The gravest consequences of the neglect of that Indian industry, are described by the Board thus: "Finally, and this is the gravest consequence of all, the shock to public confidence in the future of Indian industries would be extreme. It has long been recognised that the progress of industrial development in India will be slow until Indian capital is forthcoming in much more abundant measure than it has been in the past. The complete collapse of the greatest single industrial enterprise in the country would put back the clock for twenty years at least. We do not claim that these considerations are decisive. But they are factors which must be taken into account in arriving at a decision on a momentous issue."

CENTRAL SECRETARIAT LIBRARY
IND-1040
GOVT OF INDIA

KB